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UNIVERSITY OF ALBERTA

LEARNED HELPLESSNESS AND DEPRESSION IN OLDER WOMEN IN THREE HEALTH CARE SETTINGS

BY
CHRISTINA BURTON

A THESIS
SUBMITTED TO THE FACULTY OF GRADUATE STUDIES AND RESEARCH
IN PARTIAL FULFILMENT OF THE REQUIREMENTS OF THE DEGREE
OF MASTER OF NURSING

FACULTY OF NURSING

EDMONTON, ALBERTA
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The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies and Research, for acceptance, a thesis entitled "LEARNED HELPLESSNESS AND DEPRESSION IN OLDER WOMEN IN THREE HEALTH CARE SETTINGS" submitted by CHRISTINA BURTON in partial fulfillment of the requirements for the degree of MASTER OF NURSING.

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Date: October 26, 1990

DEDICATION

To my family, especially Katrina and Milt, for their support and patience.

To my belated Mother, for her example and memories.

To the Holy Spirit that leads me in the right path.

To the friends that have listened and encouraged me.

And especially to those women who participated in this study, for their strength and willingness to share.

ABSTRACT

The objective of this study was to investigate learned helplessness and depression in older women in three different health care settings: home care, acute care and long term care. Older people experience many losses and when assistance with health care is required, this may be viewed as another loss of independence. Ninety-nine women agreed to participate and thirty three per setting comprised the convenient sample. The subjects were tested on depression using the Geriatric Depression Scale (GDS) and learned helplessness using a Geriatric Learned Helplessness Scale (GLHS) adapted from a previous instrument. Functional dependence was assessed to control for and to assess its effect on depression and helplessness. Other personal factors which might relate to depression and helplessness were also investigated.

The findings revealed that the majority of women in the three health care settings had average to mild ratings of helplessness and depression, very few had severe ratings, and 40% fell within the moderate range for helplessness and 19% for depression. There was a nonsignificant trend for women in home care settings to have the lowest scores on both variables, with women in acute care next and those in long term care last. There continued to be no significant differences between settings for these variables with the effect of functional dependence removed. Other factors found to be significantly correlated to both depression and helplessness were functional dependence, subjective health and social contact (phone and personal). Age and length of stay on the health care program, on the other hand, were not significantly correlated. Helplessness and depression were not explained by educational status, ethnic origin, marital status or employment history. Helplessness and depression were significantly correlated. These findings suggest that the helplessness related to depression is affected also by other factors. Implications for nursing practice, research, administration and education are discussed.

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CHAPTER 1

INTRODUCTION AND STATEMENT OF THE PROBLEM

General Problem

The sense of control and the ability to influence outcomes through freedom of choice is an intrinsically motivating force in human behaviour (Schulz, 1976; Schulz & Hanusa, 1975). The concept of learned helplessness refers to the development of perceived helplessness following repeated experiences with lack of control (Abramson, Seligman & Teasdale, 1978; Seligman, 1975). The perception of helplessness may extend to other areas of a person's life where control is possible, and if the perception is not corrected, depression may result (Alloy, Abramson, Metalsky & Hartlage, 1988). Older people experience many losses and when assistance with health care is required, this may be viewed as another facet of loss of independence. Health care workers need to be aware of the prevalence and factors relating to helplessness and depression in all health care settings so that appropriate interventions can be made.

Unfortunately, there is evidence that recipients of health care, and in particular, older adults, are not always given the information they need to make decisions about care, nor are they involved sufficiently in providing self care activities (Dunkle, Coulton, MacKintosh & Goode, 1982; Lenz, 1984). The concept of learned helplessness may help to identify and describe the various experiences of older adults in different health care settings. The elderly may perceive a lack of control over the care received due to experiences with repeated losses of a physical and social nature. The impact of accumulated losses affects the older person's belief that individual needs are important - the view that if a person tried to be involved in care, that desire would not be considered. The ageism of our society affects the older person's self-concept so that helplessness is internalized from the negative attitudes of others. Health care settings vary both in the specialization and organizational approach of care for the older adult. This affects the opportunity for the older adult to exercise autonomy particularly where self-care and health care decisions are concerned. Three different health care settings providing different possibilities for degree of client autonomy were chosen for comparison of learned helplessness and depression. Women were studied because they have been the traditional care givers who must adjust to receiving care. Also, since they represent the largest proportion of aging people receiving health care, it is important to limit the study to women to achieve balanced sample characteristics.

Need for the Study

It is important for nurses to understand the impact of the health care setting on recipients of care so possible changes to the environment and care provided can be made to enhance client well being. Since nurses are in a position to screen for patterns of helplessness, appropriate referral for psychological assessment and possible intervention can be made. Promotion of independence can be emphasized to prevent helplessness patterns from initially occurring. With the information this study will produce, nursing knowledge about the older adult's need for control will be enhanced. This in turn may affect nursing practice if nurses allow more opportunity for client autonomy. With increased knowledge, the need for further research is unveiled.

Statement of Purpose

The purpose of this study is to describe learned helplessness and depression in three health care settings. The following additional questions will also be investigated:

- Do other sociodemographic variables, such as age, functional status, marital status, length of stay on the current program, most recent past employment status, education, subjective degree of health, and social support account for significant levels of learned helplessness and depression?
- Is there a relationship between learned helplessness and depression ratings in the study?

Definition of Terms

Learned Helplessness - A psychological state in which an individual has learned to believe through repeated real or perceived experiences, that there is no use in responding because regardless of the effort expended, the consequences will remain the same (Seligman,1975).

Depression - A state with the attributes of a specific alteration in mood, a negative self-concept associated with self-reproaches and self-blame, regressive and self-punitive wishes, bodily function changes and changes in activity level.

Older woman-A person over 65 years of age who is female.

In the following study a literature review is presented in chapter two, followed by the research methods and procedures in chapter three, the results, discussion and interpretation of findings in chapter four, and finally conclusions and recommendations in chapter five.

CHAPTER II

REVIEW OF RELATED LITERATURE

Introduction

This chapter includes a review of the literature on learned helplessness and its relation to depression and older women in the health care system. The rationale for conducting the current study is substantiated in the review of research which also identifies areas requiring further study. First, literature on the original learned helplessness model and related research is presented. Since the original model was revised, the revised model of helplessness and its relation to depression are discussed next. The research investigating this revised model is then reviewed. This research presents conflicting results which point to the complexity of the relationship of helplessness and depression. Finally, the literature on the relationship of helplessness to the older woman and the health care setting are discussed.

Learned Helplessness: The Original Model

The concept of learned helplessness is based on the assertion that if people experience repeated lack of control over events they eventually learn not to respond. They come to believe that there is no use in trying because regardless of the effort expended the result will remain the same. The individual then gives up trying and develops a helpless perception of self (Seligman, 1975).

Seligman's (1975) original learned helplessness hypothesis was based on the premise that learning outcomes are uncontrollable results in motivational, cognitive, and emotional deficits. People learn that the efforts to control outcomes do not work and such learning makes it difficult to later learn that efforts do produce certain desired outcomes (Maier, 1980). Cognitive deficits become apparent in reduced decision-making abilities and failure to perceive success when it does occur (Priddy, Teitelman, Kivilghan & Fuhrmann, 1982). Motivation is affected because the person perceives outcomes as generally uncontrollable so does not want to try various activities. Emotionally, learning that outcomes are uncontrollable produces a flattened affect (Abramson, Seligman & Teasdale, 1978).

Research on the Original Learned Helplessness Model

The concept of learned helplessness was first identified in animals which were put in a situation where they normally could escape painful shocks. After a series of shocks from which there was no escape, these animals learned that they had no control and did not try to escape in other tests when escape was possible (Overmier & Seligman, 1967; Seligman & Maier, 1967). Experiments measuring human reactions to uncontrollable outcomes verified that people learned not to try to change outcomes that had not produced the desired response on previous attempts (Hiroto, 1974; Hiroto & Seligman, 1975; Mikulincer, 1988; Power, 1987;

Peterson, Schwartz & Seligman, 1981). Glass and Singer (1972) found that if people perceived they were in control, even if they were not, they would keep on trying regardless of whether they were successful or not (as cited in Seligman, 1975). A motivational deficit was apparent for subjects after repeated unsuccessful attempts to control an outcome in all the studies (lack of voluntary initiative to attempt further control in particular situations). Depressed affect was not identified in all of the studies on learned helplessness (Glass & Singer, 1972 (as cited in Seligman, 1975); Hiroto, 1974; Hiroto & Seligman, 1975). Perhaps this was due to the temporary nature and minor intensity of the helplessness induced in most of the studies.

Other studies have focused on interventions to overcome learned helplessness because if the helplessness is learned then it can be unlearned. It has been found that techniques designed to restore the individual's sense of perceived control were successful in overcoming learned helplessness (Avorn, 1983; Rodin & Langer, 1976; Schulz, 1976; Schulz & Hanusa, 1978). Unfortunately, all the interventions attempted were superficial and short term (eg. pep talks, a plant to care for, control over timing of student visits), so did little to tend to the underlying long term problem of a lack of perceived control.

Learned Helplessness and Depression: The Revised Model

In 1978, Seligman's original hypothesis was revised based on the attribution theory which states that when a person realizes that he/she is helpless, a reason for the cause of helplessness is sought. Reasons for helplessness could then be attributed or associated with one of three possible types of causes: (a) stable (recurrent) or unstable (short-lived, intermittent); (b)global (occurring over a wide range of situations) or specific (occurring over a specific range of situations); and (c)internal (personal) or external (universal)(Abramson et al., 1978).

The perceived cause of helplessness influences whether the expectation of future helplessness will be chronic or generalized, and whether helplessness will lower self-esteem or not (Abramson et al, 1978). If an attribution is made to a stable factor, then a person may perceive helplessness as long term. Abramson et al. (1978) speculate "that the intensity of self-esteem loss and affective changes will increase with both certainty and importance of the event the person is helpless about" (p.59). For example, if a person feels failure at an event was due to personality, intelligence, or good looks (stable-internal factors), then they may believe they are unable to control or change outcomes in the future. Motivation (decreased desire to try again) and cognition (perception of helplessness) may become chronic. If an attribution is to a temporary external cause such as tiredness, luck, or bad timing, then the helplessness will only be transient and self-esteem will not be affected. The importance of the event failed will impact the severity of the motivational deficit and chronicity of the perceived helplessness.

Research on the Revised Model of Helplessness and Depression

The revised model hypothesizes that the combination of three attributional types increase the likelihood that depression will result after repeated experiences with lack of control. These attributional types are; the tendency to blame oneself for helplessness, the perceived long term condition of the cause of helplessness and the tendency to generalize helplessness to other situations. Most research on the revised model investigated the relationship between attributional type and depression. The results are conflicting because some studies find all three areas of attribution relate to depression, while others do not find one or more of the attributional styles to relate to depression.

The first set of studies discussed support the revised model of helplessness. These studies examined attribution types of depressed people. The next set of studies look at attributions of subjects after induced helplessness and these studies also lend support for the model. Two replications of studies that use a temporary real life failure situation follows. One finds conflicting results as it supports the model while the other does not. Finally studies that use a prospective research technique to see if a depressive attributional type precedes depression are discussed. These studies do not lend support for the model.

The first set of studies reveal depression has been associated with helplessness when causes for failure to control a desired outcome are attributed to internal and long term factors which are generalized to other situations. These studies compared groups of depressed people with non-depressed people on attributional type. For these studies, groups were sometimes matched for attributional style or depression symptoms instead of random sampling. The attributed cause for helplessness was then studied retroactive to a depressed state (Brown & Siegel, 1988; Klein et al., 1976; Maiden, 1987; Peterson, Schwarz, & Seligman, 1981; Power, 1987; Rodin & Langer, 1976).

Several studies have found a significant difference between the tendency of depressed students to attribute causes for induced laboratory helplessness to internal factors when compared to nondepressed students (Golin, Sweeney, and Shaeffer, 1981; Klein, Fencil-Morse & Seligman, 1976; Kuiper, 1978; Harvey, 1981). The temporary and artificial nature of the induced helplessness causes one to be skeptical about drawing generalized conclusions about attributions and depression from these studies.

Metalsky, Abramson, Seligman, Semmel, and Peterson (1982) used a real negative life event (poor examination marks) to study the effect of helplessness using a prospective design. It was found students who presented depressive symptoms were those who blamed themselves and generalized helplessness to other situations. The tendency to blame long term factors for failure were not related to depressive symptoms. In a replication study by Follette (1987), attribution styles to these causes were not predictive of depressed mood following a disappointing exam performance. In addition, Follette tested for the decreased motivation predicted by the learned helplessness model and found that students making self-blaming attributions for poor exam marks made plans to study more. It is likely the one time negative event (exam performance) was not enough to affect motivation, because according to the model, repeated experiences with noncontingent outcomes is predictive of decreased motivation (Seligman, 1975).

To determine whether a self-blaming style existed after a depressive episode, Hamilton and Abramson (1983) did a longitudinal study to find out whether a self-blaming style exhibited by depressed in-patients persisted beyond remission of depressive symptoms. A control group was used. The depressed patients showed dramatic changes in attitude and hope as depressive symptoms abated, indicating that the attribution style may be a consequence of the depression itself. Lewinsohn, Steinmetz, Larson and Franklin (1981) had similar findings with a large community sample in a pre and post measurement of depression-related cognitions. The occurrence of depression did not seem to be related to either attributional depressive type cognitions before or after a depressive episode. Unfortunately the tools used to measure the depressive-type cognitions had questionable reliability and validity.

Similarly, Peterson et al (1981) did not find a depressive type to be present prior to a depressive episode. The study investigated whether more frequent experiences with negative life events might precipitate the internal depressive type and found a positive correlation between the number of stressful life events and an increase in self-blaming attributions made by students over a period of a year.

It appears from these studies that there is some question whether a depressive type cognition precipitates or results from a depressive episode. It may be that it exists during a depressive episode and not as a result of a learned pattern of helplessness leading to depression. Mixed results would indicate that depression is more complex than the tendency to blame oneself for problems but is also a combination of other factors.

Hopelessness Theory of Depression

Most recently, the hopelessness theory of depression has been brought forth as a consequence of Seligman's original learned helplessness model, and the reformulated model of depression (Alloy, Abramson, Metalsky, & Hartlage, 1988). This theory is based on the process leading to depression as opposed to classification of a depressive type by the presenting symptoms. The hypothesized causal chain begins with the occurrence of negative life-events (or the absence of positive life-events, and/or the presence of uncontrollable events), and each subsequent event increases the likelihood that depressive symptoms will occur. It appears that depression does not necessarily develop when a self-blaming type of cognition is present. Rather, when this tendency exists in the presence of a substantive negative life event, then the likelihood of depression developing increases (Gong-Guy and Hammem, 1980). The degree of importance attached to the particular negative or uncontrollable event, the presence of an attributional depressive type, and the presence of other situational factors (ie. the number of negative events, the presence of other types of depression, the state of remission or relapse of other depressive episodes) are related to the likelihood and severity of developing depressive symptoms (Metalsky et al., 1982; Peterson et al, 1981). Thus there are many variables which contribute to the development of depression in addition to repeated experiences of helplessness.

Measures of Depression and Helplessness

Many tools measuring depression have been developed, but the one most suited for the older adult is the Geriatric Depression Scale (Kafonek, Ettinger, Roca, Kittner, Taylor &

German, 1989; Lesher, 1982). This tool is discussed in detail in the instruments section of Chapter III. No similar tool to measure helplessness in the older adult has been developed. Further, no tool measuring all the elements identified as contributing to depression in the hopelessness depression model has been formulated.

The tool that was initially selected to measure learned helplessness in this study was developed by Quinless and McDermott Nelson(1988). It was chosen because it appeared to be the most rigorously developed tool found in the literature. Since it was selected initially to be used in this study, further information on reliability and validity will be addressed in the instruments section of chapter III. The other tools used to measure learned helplessness in studies were tests of related concepts such as depression and self-esteem. The expanded Attributional Style Questionnaire was developed by Peterson, Schwartz, and Seligman (1981) and is lengthy. It is a revision to the Attribution Style Questionnaire(ASQ), which was developed by Seligman, Abramson, Semmel and von Baeyer (1979). As well, the tool measures attribution type as opposed to a general level of learned helplessness. The situations which the tool requires the subject to respond to are not relevant for the older adult, and the reading and comprehension levels all too complex. Most nurses need an instrument which will screen for helplessness not attributional type. A high level of learned helplessness would signal the need for referral to professionals skilled in more in-depth psychological assessment.

Another instrument, the H25, was developed by Donovan, O'Leary, & Walker (1979) to measure subjective helplessness. The tool was developed using normative data from veterans participating in an alcoholic rehabilitation program. This tool appears geared towards clinical depression as opposed to learned helplessness and was not applied in any other study on learned helplessness.

Learned Helplessness and the Older Woman

The elderly face many physical, social and personal losses partially related to the biological aging of the body. Perhaps the most difficult adjustment for older people is society's negative view of aging (Rodin & Langer, 1980). The literature identifies older people as being susceptible to helplessness because of society's negative view of aging which is typified by aging labels and stereotyping. This may affect older persons' concepts of themselves. The research shows women are at particular risk because the already devalued role of women related to the nurturing role is diminished with age.

The message of incompetence or loss of control need not be transmitted by shocks. Rather, helplessness can be inferred from subtle environmental cues from a society where the older person is labelled as incompetent (Avorn, 1983;

Langer & Rodin, 1976). How many older people "who face life without passion, accepting whatever comes their way- have they like dogs, experienced shocks beyond their control so frequently and consistently that they've given up trying" (Schaie & Geiwitz, 1982, p.253)?

Benson (1982) and Solomon (1982) upon reviewing the literature found many studies confirming stereotyping of the elderly as incompetent, dependent, forgetful, and pessimistic. Rodin and Langer (1980) after having studied extensively the effects of aging labels, came to the conclusion that "if our society has developed labels that create certain sets of negative expectations with regard to aging, it is likely that people will act in a manner that is consistent with these labels"(p.15).

Unfortunately, social influences such as retirement, bereavement, labelling and learned helplessness may influence cognition more than we know. Avorn (1983) argues that cognitive experiments on the elderly have not taken into account the clinical and social phenomena associated with age. He says these factors may have more effect on the cognition than does psychological age.

Women face unique adjustments to aging and to accepting health care services. In a national study, women over 55 years of age show distinctly higher rates of giving help with housework, baby-sitting and personal care when compared to men. Helping patterns are most affected by subjective health, age, living arrangements, gender, and education. As age increases though, there is a steep drop in help giving patterns (Connidis, as cited in National Advisor Council on Aging, 1989). This decreased helping activity would contribute to lowered self-esteem. In a health care situation this is particularly difficult because the person used to providing help is in a position where help must be accepted.

Women show higher rates of depression than men. This is attributed to the less rewarding social roles of women. Risk factors contributing to poor mental health in general are low income, advanced age, and poor physical health (Canadian Mental Health Association, 1987; Lowe, 1989). How must it feel for the older woman whose identity is attached to an already devalued social role, to not be able to carry out the nurturing role?

The Older Adult Receiving Health Care in Different Settings

This section will explore how three different health care settings may affect helplessness and depression in older adults. First, general factors contributing to learned helplessness in most health care settings will be addressed. These factors relate to helplessness associated with real functional dependence and the helplessness associated with the reinforcement of helpless behaviours by health care workers and other patients. The research literature then describes how the older adult functions within our current health care system. The research on the effects of institutionalization on older adults is then discussed. The need for specialized geriatric health care is then identified. Finally, there is a brief discussion about how the characteristics of the three health care settings used in this study might impact helplessness: the acute care setting, the long term care facility, and the home care setting.

The following studies identify the very real helplessness associated with functional dependence. This functional dependence often leads to facility admission, but the helpless feelings associated with this dependence is not addressed in these studies. Maguire, Taylor and Stout (1986) found factors associated with prolonged stay in an acute care setting to be similar to those leading to long term care placement. Cognitively impaired older adults have significantly longer stays in acute care settings than the unimpaired (Johnston, Wakeling, Graham, & Stokes, 1987). Studies identified the following problems as leading to long term care institutionalization most frequently: need for assistance with mobility, financial management, household maintenance, personal care (Cohen, Tell & Wallack, 1986; Gonyea, 1987; Pearlman & Ryan-Dykes, 1986; Nelson & Winter, 1975), poor housing conditions, and a lack of financial and social resources (Beland, 1984; Brock & O'Sullivan, 1985; Pearlman & Ryan-Dykes, 1986). These studies correlated factors leading to institutionalization from the view of the patient, family and medical records.

Slimmer, Lopez, LeSage and Ellor's (1987) examined the perceptions of registered nurses regarding learned helplessness and found that it was perceived as an undesirable condition characterized by dependent, passive, and rigid behaviours resulting from being controlled by others. Rothbaum, Snyder, and Weisz (1982) argue similarly, that helpless behaviours may be goal oriented to protect against disappointment, or to gain approval for expected dependent behaviours. Avron's (1983) study identifies that helping behaviours of nurses tend to reinforce helplessness behaviours in patients. Another study by Blates, Honn, Barton, Orzech, and Lago (1983), found that elderly patients themselves gave supportive interaction to other elderly patients only for dependent self-care behaviours. If helpless behaviours are expected and reinforced, then the older adult might believe they have less control over the future and then behave in a helpless manner.

It is possible that the stereotypical view of the older adult has affected the desire to control decisions made about their own welfare. Woodward and Wallston (1987) report that subjects over 60 years old desired less health related control than younger cohorts. The authors point out that this may be a result of several factors. First, the elderly grew up in an era where the omnipotence of physicians was less likely to be challenged. Next, social pressure at that time demanded a more passive role, and finally, differences in performances on cognitive tests could result in less confidence to make decisions. This implies that the older adult needs more encouragement from health care workers to become involved in their own care.

Institutionalization is often associated with increased disorientation, helplessness, disengagement, depression and depersonalization (Golander, 1987). This is due in part to the lack of control forced upon the client by institutional routine. When to eat, bathe, and sleep are no longer under personal control (Aasen, 1987). For other disabled people, helplessness extends to where they will sit, when they can lie in bed, and when they can go to the bathroom if help is needed. It is possible that if these people experience repeated loss of control, they will become helpless in areas of their life where they have control, because they have learned to perceive themselves as helpless.

Subjective stress, coping strategies and depression have been correlated with perceived lack of control and autonomy in an exploratory study on nursing home residents (Saup, 1987). Core dilemmas identified by patients in an exploratory study by Golander (1987) on nursing home residents were how to: achieve fast relief from physical discomfort; maintain a balanced relationship with staff, fellow residents and family; retain a sense of independent-self-uniqueness in a state of dependence and collectiveness; and make time pass meaningfully. The effects of institutionalization may result in loss of identity and development of docile behaviour which can "strip away the very essence of a person's being and his/her dignity and self-worth" (Huss, Buckwlter & Stolley, 1988, p.31). Further, regulation of behaviour has the potentially serious iatrogenic effect of reducing or shutting down the client's autonomous healing capabilities (Levine, 1978).

Studies have frequently pointed to the need for specialized care for the older adult. In acute care settings, the need for specialized geriatric units has been identified and studies point to the improved quality of care and positive outcomes for the client in these settings (for a comprehensive overview see Rubenstein, Rhee, & Kane, 1982). This type of specialized care is generally lacking in most health care settings, but in particular, is found to be a problem in the acute care setting geared towards care of the young. The resulting quality of care may be reflected in the client's perception of control and feelings of helplessness.

The primary focus of the hospital has been to facilitate the medical practice of biophysical interventions for the acutely ill (Alberta Association of Registered Nurses, 1987). For the older adult who has been in the acute care setting for a period of time, with the accompanying stigmatization of being aged, the quality of care received may be affected. The urgency of the needs of the other acute care clients on the ward requires most of the attention of hospital staff. Since it often takes more time to promote client dependence, staff may do things for the client that they are able to do for themselves. The fact that performance of such tasks requires time consuming supervision can serve as a deterrent to promotion of independence. The client may soon feel helpless and with repeated experiences, become depressed.

The long term care facility is geared towards lengthy client stays and therefore tries to promote a home-like atmosphere for clients. Where possible, client preference and involvement in activities is encouraged. Also, in contrast to the client in an acute care setting, there is no competition for care with acute care clients. Thus, staff may be more inclined to spend the time required for supervision of self-care activities.

In the home, where the older adult might experience more control over routines and perform more self-care activities, the levels of learned helplessness and depression may be lower. Although a person at home may require as intense levels of care as someone in an institution, there is often a good social support which allows the person to remain at home. The client must perform self-care tasks in order to remain at home because assistance with activities is not as readily available in the home as it might be in the institution. Home care admission criteria are such that a person must be assessed by a doctor who deems that the person is unable to perform self-care and that either support or professional services are required.

Summary of the Literature Review

In summary, the concept of learned helplessness refers to the occurrence of repeated experiences with noncontingent responses which affect ability to later learn that a response can produce certain outcomes. Motivation to affect future responses is thwarted and often self-esteem and depressive symptoms are manifested as a result. Attributional styles correlate with chronicity and internality of learned helplessness. There are conflicting study results with the premise that a depressive type of attribution exists prior to or after a depressive episode. The likelihood of resulting depression is dependent upon the presence of a depressive attributional type, the presence of negative or uncontrollable life events (or the absence of positive life events), and presence of other causes of depression.

To briefly summarize the research on learned helplessness, emphasis has been placed on testing the theory itself and its relation to depression. Unfortunately much of the literature on learned helplessness has been scientific in nature where reactions to laboratory-induced helplessness were observed for temporary changes in motivation and cognition. Long term effects of learned helplessness can only be estimated by examining behaviourial manifestations of depressed affect after it has been identified. The studies applying the concept have moved from the laboratory into the field setting and are becoming useful for explaining human behaviour in the real world. Those studies introducing interventions to facilitate perceived control usually use short-term interventions. Studies might show more significant improvement in learned helplessness measures if interventions to facilitate control were long-term and meaningful to the client population. There is some contradiction in the studies as to which specific attributional factors predispose one to a depressive type of mind set. It appears that helplessness leading to depression is a complex process which is impacted by many other variables. It has been hypothesized that a hopeless type of depression may result if people blame themselves for repeated and significant negative life events. Finally, there is a tool to measure depression in the older adult, but no similar tool to measure helplessness for the older adult.

Older people are susceptible to helplessness because of society's negative view of aging which is typified by aging labels and stereotyping. This may affect older persons' beliefs about themselves. The research shows women are at particular risk because the already devalued role of women related to the nurturing role is diminished with age. Research shows women have a higher incidence of depression than men.

General factors contributing to learned helplessness in most health care settings relate to helplessness associated with real functional dependence and the helplessness associated with the reinforcement of helpless behaviours by health care workers and other patients. The older adult has typically not been involved in or questioned many health care decisions made on his or her own behalf. The research on the results of institutionalization on older adults identifies many negative demoralizing effects. Specialized geriatric health care may improve care for the older adult and decrease some of the helplessness associated with being a "patient". Finally, different health settings may impact helplessness to varying degrees.

Conceptual Framework

Although each setting has different types and levels of care available, the older adult in each setting requires some degree of assistance with activities of daily living. If the learned helplessness model is appropriate for explaining behaviour of older people in health care settings then, as there is less opportunity for older adults to exercise self care and autonomy, greater levels of learned helplessness and depression should result. The older adult who has little control over what happens, finds out that there is no use in trying to control outcomes. In the institutionalized health care setting where routines are established, and the medical model of care may promote dependence, the older adult relinquishes control over the opportunity to adapt to the environment. Older people in particular need encouragement to participate in self-care and decisions affecting their well being. For the older woman who is used to giving care, feelings of loss would be accentuated if she then must accept care. If the lack of control is traumatic for the client and uncontrollable experiences frequent, the negative self image that results could lead to a depressive episode. Helplessness and related depression of older adults might differ from one health care setting to the next depending on the degree of autonomy experienced and facilitated within each setting.

CHAPTER III

METHODS AND PROCEDURES

This study is descriptive and comparative in nature and describes learned helplessness and depression in three different health care settings. It was conducted in field settings with three different client groups of older women; those in a long term care institution, at home receiving home care, and in an acute care setting. Quantitative data was gathered during one interview session using questionnaires on learned helplessness (LH) and depression. Since functional dependence might contribute to helplessness, functional dependence was assessed to compare and control for possible variations between groups. Other sociodemographic factors which might contribute to LH and depression were examined. Since this study was conducted in the field and control for extraneous variables was difficult, greater importance in this study was placed on the study design and sample selection procedures.

Setting

Each health care setting will be described briefly to provide a frame of reference for the study. The home care program is a provincially funded program which is administered by local boards through 27 health unit regions. The program offers health services (such as nursing and rehabilitation therapy), support services (such as housekeeping and personal care assistance), and case coordination of community services to people in their homes. At the time the study was conducted, the provincial home care caseload for March 1990 was approximately 18,775 (Home Care Information System, Alberta Health (HCIS), 1990). The local home care program included in this study had a caseload of 861 for March, 1990 (HCIS, 1990). The health unit area contains five suboffice areas and was chosen because it bordered a large western Canadian city where the other health care centres were located. Three of the suboffice areas within the health unit were chosen from which to select the study sample because of reasonable proximity to the city referred to. The setting and personal routines of the subjects in the home care setting varied with each individual. Usually the questionnaires were completed on the individual's kitchen table or in the living room. Often personal pictures and souvenirs filled the home. The atmosphere was generally friendly and warm.

The acute care hospital was a 932 bed facility built around the 1960's. Referrals came primarily from the medical surgical units which had about 30 beds per unit, mostly in four bed wards. There are 3,386 general hospital beds in the Canadian city (Long Term Care Institutions Branch, Alberta Health, 1990). In the period during which the research was conducted there were no special units for geriatric patients and so the patients were on medical units. Patients could be seen dressed in housecoats and pyjamas either walking in halls or seated on their beds with a stare that said "I'm waiting to go home." Here the atmosphere was typically 'hospital', with cream coloured walls, busy nursing staff, intravenous poles, medication pumps, urinary drainage bags and doctors and nurses with stethoscopes. Patient treatments were usually scheduled on a routine basis if possible and meals given to patients at their bedside at specified times. Between scheduled periods patients could visit with company or watch television.

The long term care facility was a 322 bed multilevel care centre with two pavilions. The one pavilion (housing 175 beds), from which all but one referral was received, was a newly built four story building. The two pavilions were separated by a large atrium. The patient room windows that opened on to the atrium received sunlight from the atrium skylights. Tables, chairs, stone walkways and plants filled the main floor of the atrium. A confectionary, conference room and administrative offices bordered the edge. Social events, and recreational and exercise classes were scheduled here routinely. Meals were served in a common dining area at specified times. Each floor in the facility was divided into units which contained a certain number of beds. A nursing desk where charts were kept and a medication room was central to each unit. A common dining area for scheduled meals was located on every unit. Although there was a special unit for mentally dysfunctioning elderly, such residents could also be found in other units sitting in chairs or wandering through the building calling out names, getting lost in corners etc.. Most rooms were two bed units divided by a curtain, with large windows, a private sink and mirror and a shared bathroom. Usually family pictures hung on the walls, and souvenirs were placed on an end table. All residents were dressed in street clothes. Residents completed the questionnaires in their room on all occasions. Most often the roommate would graciously leave the room, but there were times when the study subject would insist it did not matter if the roommate was present (usually because he or she could not hear anyway). In this situation, the researcher would pull the curtain between the beds and talk in a lowered voice.

The Sample

Referral Criteria and Target Population

The desired target population in this study was any woman over 65 years of age, receiving health care services in one of three settings (acute care, long term care and home care) who met the following criteria: could communicate clearly in English, had minimal or no cognitive impairment, and had a comparable level of functional ability. The target population was the entire group of cases from which the sample could be randomly selected. For practical and ethical reasons the sample in this study was not a random sample of cases from the ideal target population. As a result, a sample from an accessible population was used which was representative of a hypothetical population meeting the criteria of the target population. The accessible population consisted of all people in one of the three settings who met the following criteria:

1. at least 65 years of age;
2. agreed to have the researcher explain the study and gave an informed written consent;
3. orientated to day, time and place and able to respond to a questionnaire;
4. able to understand and speak the English language;
5. able to hear;
6. achieved a score of 8-10 on the Mental Status Questionnaire (MSQ)(Kahn, Goldfarb, Pollack & Peck, 1960).

Sample Selection

The sample selection criteria and selection procedure are described in this section. To make the three groups as comparable as possible, the following sample selection criteria were incorporated into the study: gender, mental status, admission date, and functional status. The selection procedure included obtaining the desired number of subjects from each setting.

Most health care recipients over 65 years of age are women, so to balance the sample in the three settings, only women were selected as subjects. The institutional sample would have probably had more women in a random sample with both sexes. Additionally, since women tend to be the primary care givers in the home, it is reasonable to expect that the home care setting would have had a greater percentage of men. The samples would not have been comparable if both sexes were used in the study.

Competent mental functioning is essential to the accurate completion of the questionnaires, so part of the referral criteria included the need for the person to be orientated, alert and able to complete a questionnaire. Further to this, the mental status questionnaire (MSQ) was completed on each person referred to the researcher (see Appendix A). If a referred person scored less than 8 on the MSQ, they were thanked for participating in the study, and the questionnaire was destroyed after the researcher left the client. This happened for seven referrals.

An admission date of a minimum of six weeks was chosen as a referral criterion for people in the long term care facility to allow for environmental adaptation. Referrals could be made for women in acute care after three and a half weeks to allow for the effects of hospitalization to occur. Since women receiving home care did not have to adapt to a new environment, no admission date criterion was set. As it was, no one had been on the home care program less than one month.

To achieve some degree of similarity in functional status, referrals in the long term care setting were limited to those women with a patient classification levels of A to D (which capture lower to medium care level requirements). It was hoped this would be more comparable to the care requirements of people in their homes. Similarly, those referred clients on home care had to be judged by the case coordinator as requiring facility admission if home care services were not provided. Those women in the acute care setting were required only to be able to complete a questionnaire.

The director of nursing services for each setting was contacted and a meeting set to discuss referrals, contact people and lines of communication. A presentation was made to the home care staff on the proposed research and referrals, but this was not required in the other settings. Staff from each agency identified people who met the referral criteria. The staff member would then ask verbal permission of the client to have the researcher come to explain the study to them. A referral was then made to the researcher through the agency contact people using the referral sheet (see Appendix B).

Only those clients meeting the referral criteria qualified for the sample selection. Tables prepared by Bratcher, Moran, and Zimmer (1970) were used for determining sample size. These tables are used when it is known that tests such as the analysis of variance will be conducted to compare differences between means of groups. These tables are also useful in determining the sample size if the variance in experimental tools are unknown, and if other parameters such as population size are unknown (as cited in Kirk, 1982). The tables are based on how large a difference the researcher wants to identify if some of the parameters required for sample size formulas are unknown (Kirk, 1982). Based on the assumption that an analysis of variance would be conducted to assess the differences of means between groups, a power of 0.95, a standard error of 1, three groups and a significance level of 0.05, a sample size of ninety-nine subjects was required (thirty three per setting). It was hoped that of those people meeting the selection criteria in the three health care settings, that a random sample of 33 subjects could be chosen from each setting. However, it was not possible to do this in all three settings for a variety of reasons.

In the home care setting, it was necessary to obtain a convenience sample of 33. Many of the clients were not referred because they did not communicate in English and because they did not require facility admission without home care services. Of the home care referrals received, one client had moved, one did not meet the mental status criteria and another was in the hospital.

Similarly, a convenience sample was obtained from the acute care setting. Many of the clients did not meet the referral criteria of length of stay or mental status. Of those referred, five were discharged before the researcher could meet with them, five did not achieve an adequate score on the mental status questionnaire, one person was too ill, and one other refused to participate. It took eleven weeks to obtain the required number of acute care study subjects.

Initially, a convenience sample of thirty four clients from one wing of the long term care facility was obtained. One client did not achieve an adequate score on the mental status test, and three others did not want to participate in the study. As a result, four more referrals were obtained from another wing from which three more subjects were selected.

Sample Profile

The sample consisted of 99 subjects between the ages of 65 and 99 years. The mean age for the entire sample was 79.77 years. The mean Katz Index of activities of daily living score was 1.71 with a range from '0'(independent) to '6'(functional dependence in six areas). The Katz score of '2' means functional dependence in two areas, which could be generalized to indicate an overall mild level of functional disability. Subjective health ranged from poor to excellent with the mode of 'good' most frequently being reported (40/99 subjects). Most women were widowed (76%), with only 10% being single or separated and 13% married. The majority of women (53%) had been receiving care in the current health care setting for over one year, another 25% between one and a half to twelve months and 22% for less that one and a half months. Other sociodemographic data revealed 72% of the women were of European decent, while 18% were Canadian (two generations removed), 7% were of American (US) decent, and only 2% were of other ethnic decent. Employment history showed that 47% of the women had been employed as unskilled labour, 38% were never employed outside the home, 11% were either self-employed or semi-skilled employees (e.g. secretaries), and only 4% were skilled/professional employees. With regard to education, 14% had completed grade five or less, 41% between grades six to nine, 26% between grades 10-12, and 17% completed technical school or university. Social contact with friends or family ranged from once a day (49%), to every few days (27%), to less than every week (24%). Phone contact was more frequent than social contact with 60% having daily phone contact, 26% every few days and 14% less than once a week. Summary tables of the mean or frequency, the range (if appropriate), and the standard deviation (if appropriate) of each of these descriptive personal variables for the entire sample and each setting are presented in Table 3.1.

To estimate the similarity between groups, a chi-square analysis was done on the categorical variables of employment history, ethnic background, education and marital status with setting. The chi-square, degree of freedom and probability are indicated in the frequency tables in Table 3.1. for each categorical variable. The chi-square analysis was used to identify whether there was a relationship between care setting and these variables. Results indicated there was no significant different relationship for these variables with group setting. With length of stay, subjective health, social contact and phone contact treated as categorical data (each variable was broken down into categories), a chi-square analysis indicated that there was a significant relationship between setting and the variables of length of stay and phone contact. This is understandable since the long term care facility would naturally have a longer length of stay, followed by home care and then acute care. Home care clients had the most frequent phone contact, followed by acute care, then long term care. There was no significant difference between settings for the variables of subjective health and personal contact. Since age was treated as interval data, an analysis of variance was done to see if there was a significant difference in mean age for the three settings. Table 3.2 provides a summary of the ANOVA results for age by setting and indicates that there is a significant difference between settings for mean age. Women in longterm care had the lowest mean age (83.97), with women in home care next (79.36) and women in acute care last (75.97).

Table 3.1

Summary of sociodemographic Variables

AGE

	mean	range	stand. dev.	number
all settings	79.76	65-99	8.04	99
home care	79.36	65-94	6.82	33
acute care	75.97	66-85	5.06	33
long term care	83.97	68-99	9.63	33

F=9.68 dfh=2 dfe=96 p=0.00

FUNCTIONAL STATUS: Katz Index of ADL (frequency)

	Number of functional dependent areas							
	0	1	2	3	4	5	6	Number
all settings	18	40	16	7	13	5	0	99
home care	7	13	9	2	2	0	0	33
acute care	7	11	4	3	4	4	0	33
long term	4	16	3	2	7	1	0	33

x sq=14.23 df=10 p=0.16

SUBJECTIVE HEALTH (frequency)

	Poor	Fair	Good	Excellent	Number
all settings	22	33	40	4	99
home care	3	14	14	2	33
acute care	12	10	11	0	33
long term care	7	9	15	2	33

x sq=9.47 df=6 p=0.15

MARITAL STATUS (frequency)

	Married	Widowed	Separated	Single	Number
all settings	13	76	8	2	99
home care	5	23	4	1	33
acute care	5	24	3	1	33
long term care	3	29	1	0	33

x sq=4.18 df=6 p=0.65

Length on Health Care Program (frequency)

Weeks:	3.5-6	7-12	13-24	25-48	49-240	241-480	>481
all settings	22	10	6	9	12	20	20
home care	2	1	1	3	6	8	12
acute care	20	8	2	1	2	0	0
long term	1	3	5	4	12	6	8

x sq=70.99 df=14 p=0.00

Ethnic Descent (frequency)

	European	Canada	United States	Other
all settings	72	18	7	2
home care	26	5	1	1
acute care	23	9	1	0
long term care	23	4	5	1

x sq=18.30 df=12 p=0.00

Employment History (frequency)

	Unskilled	Semi-skilled	Self-employ	Skilled	NA
all settings	46	8	3	4	38
home care	13	4	1	2	13
acute care	16	4	2	0	11
long term	17	0	0	2	14

x sq=8.93 df=8 p=0.35

Social Contact (frequency)

	Daily	Every few days	Weekly	<Weekly
all settings	48	27	11	13
home care	18	4	6	5
acute care	17	12	1	3
long term	13	11	4	5

x sq=9.17 df=6 p=0.16

Phone Contact (frequency)

	Daily	Every few days	Weekly	<Weekly
all settings	59	26	5	9
home care	28	5	0	0
acute care	17	12	1	3
long term care	14	9	4	6

x sq=19.57 df=6 p=0.00

n= 99 all settings n= 33 home care n= 33 acute care

n= 33 long term care

Education (frequency)

	None	1-5	6-9	10-12	Tech	Univ/College
all settings	2	12	41	26	12	5
home care	0	3	16	8	4	2
acute care	1	6	11	7	7	0
long term care	1	3	14	11	1	3

x sq=11.77 df=10 p=0.30

n= 99 all settings n= 33 home care n= 33 acute care

n= 33 long term care

Table 3.2

AGE ANOVA RESULTS: by health care setting

Source	DF	Sum of Sq	Mean Sq	F ratio	Prob
Between Groups	2.0	1064.08	532.04	9.68	*0.00
Within Groups	96.0	5277.58	54.97		
Total	98.0	6341.66			

*p<0.05

These results indicated that the sample group was relatively homogenous with respect to the sociodemographic variables studied, except for age, length of stay and phone contact. Caution should be taken in interpreting these results since 50% or more of the chi square cells for all variables except subjective health had less than 5 observations. Since the intent of the study was not to establish similarity of the groups, but only to obtain a general estimate of this assessment, no further attempt at comparing groups for these variables was made.

Instruments

Four questionnaires were used in this study; the mental status questionnaire (MSQ) (Goldfarb, Pollack and Peck, 1960), the Index of Independence in Activities of Daily Living (Index of ADL) (Katz, Ford, Moskowitz, Jackson & Jaffe, 1963), and the Geriatric Depression Scale (GDS)(Brink, Yesavage, Lum, Heersema, Adey & Rose, 1982). The fourth questionnaire was adapted by the researcher to measure learned helplessness specifically for the older adult. Concepts from a tool developed for a general age group on learned helplessness (Quinless & McDermott Nelson, 1988), along with other concepts related to the conceptual model were adapted into a new tool. The MSQ was used as a screening tool for clients referred for the study to ensure those people who participated were not cognitively impaired.

The Katz Index of ADL was used to assess and control for the effects of functional disability on helplessness and depression. The GDS was used to assess subjective levels of depression. The Geriatric Learned Helplessness Scale (GLHS) was employed to measure helplessness .

The mental status questionnaire developed by Kahn, Goldfarb, Pollack and Peck (1960), is a measure used to screen mental status for people over 65 years of age (Appendix A). It consists of 10 items which test for orientation and recall. Each correct answer is worth one point out of a possible 10 points. A score of 8-10 represents the normal range for mental status.

Content and construct validity of the MSQ have been supported (Cresswell & Lanyon, 1981; Kahn, Goldfarb, Pollack & Peck, 1960). The correlation coefficient of the MSQ to dementia ratings at preadmission of 230 people to a medical geriatric service was -0.82. This was greater than correlations of dementia with physicians' assessments, mental arithmetic tests, digit span tests, and proverb tests for this same group of people (Wilson & Brass, 1973). The MSQ was selected as a useful screening tool for organic brain dysfunction in psychogeriatric patients (Pearson r = -.87). Prognosis and general severity of the client's condition were also related to MSQ scores (Cresswell & Lanyon, 1981).

An Index of Independence in Activities of Daily Living

(Index of ADL) was completed for each client to control for the possible effect of functional status on helplessness and depression. This index was developed to measure the independence of the chronically ill and aging person in the performance of six functions; bathing, dressing, going to toilet, transferring, continence, and feeding (Katz, Ford, Moskowitz, Jackson & Jaffe, 1963). Independence was defined as acting without supervision, direction, or active personal help. A subject's performance is based on actual status, not on ability (see Appendix C). If a person is able to perform a function, but refuses to do it, then it is considered that the person is dependent in that particular function. The first part of the index consists of a 6-item rating scale of three degrees of independent-dependent behaviour for each of the six functions. The second part was the index from which subjects are graded using a single summary score ranging from 0 to 6.

Asberg (1988) cited the use of the Index of ADL in six separate studies to illustrate the various purposes of the tool and to emphasize the need for a common language of ADL for different categories of personnel. Using the Index of ADL, 1200 assessments were performed by four observers on 100 older adult patients on two medical wards. Construct validity of the tool was established using the coefficient of scalability (C of S $\geq$ 0.74) (Brorsson & Asberg, 1984). Observers who used the ADL Index simultaneously differed in their observations only once in 20 assessments in a study by Ward and Lindeman (1978).

The tool selected initially to measure learned helplessness was developed by Quinless and McDermott Nelson (1988). Some of the samples used to test this tool included people over the age of 65, but the exact numbers for this age group were not provided. The tool itself is a 20 item Likert Scale. Each item is rated on a 4-point Likert scale ranging from strongly agree (4) to strongly disagree (1). The sum total of the scores yields a summary figure indicative of the degree of learned helplessness. The possible score range is 20-80 (see Appendix D for the LHS). The Learned Helplessness Scale (LHS) has been positively tested using adult samples ranging from healthy to clinically ill for internal consistency (alpha reliability coefficients$\geq$.82). Correlations between the related concepts have been tested using Beck's Hopelessness Scale (Pearson Correlation Coefficient r (n=229)=.352), and the Rosenberg Self-esteem Scale (Pearson correlation coefficient r(n=229)=-.71). Content and face validity was obtained from a review of the following independent experts: Dr. M Seligman, Dr. L. Abramson, and Dr. C. Peterson.

Unfortunately the LHS has not been tested exclusively on a group of people over 65 years of age. This tool was piloted on the first four clients referred from the acute care hospital for this study. The researcher read each item to the participant. Three of the four clients could not understand the questionnaire. It was clear to the researcher at that point, that the tool could not be used. Some of the questions were worded in a difficult manner while others were not relevant to the older age group. There were also difficult words. The Likert scale seemed difficult to grasp. When the subject was able to understand the question and answered "disagree" or "agree", the researcher prompted by saying "disagree or strongly disagree" or "agree or strongly agree?" Unfortunately this did not work well. It could be possible that the age cohort over 75 would present different comprehension and communication problems than the age cohort between 65 and 75 years. For many of these women, English was not their primary language.

The concepts presented in the Learned Helplessness Scale (Quinless & McDermott Nelson, 1988) were considered in the development of a new scale by the researcher. Other concepts proposed in the study's conceptual model were included in the simplified scale. The scale developed used more direct language and a simpler format (see Appendix E). The main concepts in this Geriatric Learned Helplessness Scale related to (a) general indicators of feelings of helplessness (items #1, 5, 9, 12, 14, 19), (b) helplessness that is generalized to other situations (items #4, 6, 8, 18, 20) (c) helplessness as learned from repeated experiences (#2, 4, 11), (d) causes for helplessness being attributed to internal or external factors (#3, 10, 13, 15, 16), and (e) the idea that older people are particularly at risk for perceiving themselves as helpless due to society's poor expectations of them (#17, 21, 22). The scale is a twenty two item self rating questionnaire requiring a yes or no answer. Twelve of the twenty two questions (#1, 2, 3, 5, 9, 11, 13, 17, 19, 20, 21, 22) indicate increased helplessness when answered affirmatively. Ten of the questions (#4, 6, 7, 8, 10, 12, 14, 15, 16, 18) indicate helplessness when answered negatively. Each response indicative of helplessness is given a score of 1, so the higher the score, the higher is the respondent's level of helplessness.

Convergent validity of this tool would be tested with use of the depression tool which measures a related concept. If the LHS measures what it is supposed to measure, then as levels of LH increase, so should levels of depression. Unfortunately, it is difficult to estimate that the helplessness the subject reports has been learned gradually over time. The tool emphasizes questions about helplessness which extend beyond the present to capture general feelings of helplessness. The tool required reliability testing as well as factor analysis to identify the dimensions and establish construct validity of the scale.

The Geriatric Depression Scale (GDS) is designed to measure depression in older persons. It consists of a thirty-item self-rating questionnaire requiring a yes or no answer (see Appendix F). Twenty of the thirty questions (numbers 2, 3, 4, 6, 8, 10, 11, 12, 13, 14, 16, 17, 18, 20, 22, 23, 24, 25, 26, 28) indicate depression when answered affirmatively. The other ten questions (numbers 1, 5, 7, 9, 15, 19, 21, 27, 29, 30) indicate depression when answered negatively. Each response indicative of depression is given a score of 1, so the higher the score on the GDS, the higher is the respondent's level of depression (Yesavage, Brink, Rose, Lum, Huang, Adey & Leirer, 1983). The convergent validity for the GDS has been demonstrated with correlations of 0.84 ($p<0.001$) with the Zung Self-Rating Depression Scale (SDS) and 0.83 ($p<0.001$) with the Hamilton Rating Scale for Depression (HRS-D). Reliability scores for the GDS have been good (Spearman-Brown formula split-half reliability coefficient of 0.94 and Cronbach's alpha coefficient of 0.94). Test-retest reliability, spaced one week apart for subjects, was 0.85 ($p<0.001$) (Yesavage, Brink, Rose, Lum, Huang, Adey & Leirer, 1983).

The suggested normal range of depression for older adults on the GDS is 0-10, anything over 21 indicating moderate to severe depression (Brink, Yesavage, Lum, Heersema, Adey & Rose, 1982). With a group of 51 clinically depressed older adults, the mean score on the GDS was 19.20 (SD= 7.08), while the mean score for a group of 20 nondepressed older adults was 5.0 (SD= 3.63)(Brink et al., 1982). Another study of older people who were physically ill, revealed the GDS differentiated between depressed and nondepressed subjects. The mean score for depressed subjects was 13.1, while the nondepressed subjects mean score was 5.10 (Gallagher, Slife, & Yesavage, 1983 (as cited in Yesavage et al., 1983)). In a study on prevalence of depression in nursing homes, Snowdon and Donnelly (1986) found 26% of the 206 subjects in six nursing homes to be depressed using a cutoff of 14 on the GDS. For this study, it was determined that a score of 0-10 would constitute a normal score, 11-14 mild depression, 15-20 moderate depression and greater than 21, severe depression.

PROCEDURE

Ethical approval from the Faculty of Nursing of the University of Alberta, the general hospital, the long term care facility, and the home care program was obtained over the period from December, 1989 to February, 1990. Data collection began February 3, 1990 in the acute care hospital, March 14, 1990 in the long term care facility and March 3, 1990 in the Home Care Program. Data collection was completed April 21,1990 in the acute care hospital, April 21, 1990 in the long term care facility, and May 5, 1990 in the home care program.

People referred for the study were asked by the appropriate health care staff member for permission to have the researcher come and explain the study to them. The study was explained to referred clients by the researcher, and voluntary participation was requested. If the client agreed to participate, one consent form was signed by the client and a copy offered to the client to keep as an information sheet (see Appendix G). If the client achieved an adequate score on the mental status questionnaire, the other questionnaires were completed on the Index of ADL, depression and learned helplessness. Sociodemographic information about those factors indicated in the literature as having an impact on depression (see section on learned helplessness and the older woman) was obtained (see Subject Data sheet, Appendix H). Social support was also included as a factor on the data sheet since it is important to a person's well being and often influences whether a person can remain at home or admitted to an institution (Beland, 1984; Brock & O'Sullivan, 1985; Pearlman & Ryan-Dykes, 1986).

The questionnaires were to be completed by the person selected for the study with the researcher present to clarify questions. Assistance with reading and completing the questionnaire was given if this was requested by the client. In 92 out of 99 situations this was requested. Although the print on the questionnaires was enlarged and in boldface type, sensory impairment, shakiness and some degree of timidness contributed to the need for assistance with completion of a questionnaire. It also seemed that participation was conditional on this assistance.

It was also the experience of the researcher that older adults required more time when carrying out various tasks. Tnerefore, subjects were allowed as much time as was necessary to complete questionnaires. The clients were not hurried through the introduction process (meeting the researcher and allowing for questions). The average length of time for completion of the questionnaires was 3/4 hour. Time was usually spent after completion of the questionnaires listening to the client's life stories. This perhaps was enjoyable for both the researcher and the participants. Generally, the introduction, questionnaire completion and stories took over one hour and ranged from one half to three hours. It was emphasized to subjects that they were not being tested in order to avoid the stress associated with test anxiety and performance failure. Rather, they were told that they should only describe their feelings as they were, and that there was no right or wrong answers.

Protection of Human Rights

Participation in this study was voluntary. All potential referrals were asked by the respective health care agency staff member if the researcher could come and explain the study to them. Only those subjects who agreed to see the researcher were seen. The study was explained to candidates meeting the sample criteria and a written consent obtained. Subjects were informed about the purpose and content of the study, the general procedures of the study, confidentiality and anonymity of the data which is obtained, and the nature of participation in the study. A subject was told she might refuse to answer any questions or to discontinue participation in the study at any time. If the person completing the questionnaire wanted to talk about their feelings in greater detail, the opportunity was given to them to do so after completion of the questionnaires. If, at any time during the course of the study, a subject displayed uneasiness with responding to questions either verbally or nonverbally, the researcher asked the subject if she did not wish to answer the question or wanted to discontinue the interview. One subject indicated nonverbally that she wished to discontinue the interview during the mental status questionnaire, so this was respected. However, the researcher suspected at the time that this was really an effort to disguise a memory problem.

During completion of the questionnaires, if a subject verbalized suicidal ideation or nonverbal communication (e.g. depression ratings of $\geq$ 21) that might indicate suicidal intention, the researcher let the client know that it would be necessary to inform relevant supervisory staff of this matter. This situation occurred twice in the acute care setting and once in the long term care setting. The nurse in charge was notified about the three women (with their permission). Other people who rated over 15 but under

21 on the GDS, who nonverbally seemed very sad, were asked if they would like the researcher to arrange for a counsellor to see them. No one indicated a desire for this; however the researcher also explored their current resources for support and left instructions for getting help if they wanted it. It was explained that care received by the subject would not be affected in any way by participation or nonparticipation in the study, since care providers did not have access to individual research data. Confidentiality was maintained throughout the study because only an identification number was used to differentiate the response data.

Data Analysis

Data on the sociodemographic variables, the Index of ADL score, and the responses to the learned helplessness and depression scales were entered into an MTS (Michigan Terminal System) file. The data was analyzed using the SPSSx software program on an AMDAHL mainframe computer at the University of Alberta. Descriptive statistics such as mean values, standard deviations, ranges, or frequencies were used to summarize sociodemographic data for each of the different health care settings and for all groups together. These are described in the discussion on the study sample profile.

A factor analysis of the GLHS was done to identify variables on the questionnaire that were highly correlated with one another. A factor analysis breaks down the variables in a questionnaire that correlate into groups of discrete concepts or factors. Each factor is interpreted for an emerging concept (Borg & Gall, 1983). Ideally, the fewer the factors the more descriptive the variables are of a particular concept. If many factors are generated, then this is indicative that the variables in the questionnaire are measuring more than one concept or trait.

A correlation coefficient was generated by each variable in the questionnaire for each factor. This coefficient (r) represents how highly intercorrelated each variable is with each factor. The coefficient represents how a variable "loads" on a factor (Borg & Gall, 1983, p.616). Those variables that did not load higher that 0.40 on a factor were not used in the interpretation of the concept. Only those factors that had an eigenvalue greater than one were used in the analysis.

Reliability was calculated for both the learned helplessness and depression scales. Cronbach's alpha coefficient was used to establish internal consistency between questions and the attribute measured.

The GLHS and GDS each yield one summary figure (interval data), therefore the mean for central tendency, standard deviation for measure of variation, and Pearson r for test of relationship were calculated. To test for significant differences in means among the three health care settings using the variables of learned helplessness and depression, analysis of variance was done. The mean scores and standard deviations on depression and helplessness were computed for each setting and together as a whole. Also correlations between helplessness and depression scores were used to assess construct validity of the helplessness tool.

To examine functional dependence, frequency data for each setting and the total group was collected and described. The chi-square analysis was used to identify whether there was a relationship between functional dependence and each setting. It is a test used with nominal data (setting) to assess differences in a variable being studied for multiple groups (Brink and Wood, 1988, p.215). The Pearson r was used to assess the strength of correlation between functional dependence and helplessness and depression. Since there was a significant relationship between age and setting, and functional dependence was a variable estimated to contribute to depression and helplessness, the analysis of covariance (ANCOVA) was used to statistically control for group differences in functional dependence (ADL) and age by adjusting the group means on the dependent variables of helplessness and depression. An analysis of covariance would indicate if there was a significant difference in helplessness and depression for the three settings by removing the effect of functional dependence and age. The analysis of covariance with covariates Index of ADL and age was run using depression and learned helplessness as the dependent variables. The ANCOVA assumed homogeneity of regression lines for each setting (Borg & Gall, 1983, p.683).

To investigate the research question as to whether any other sociodemographic variables influenced levels of depression and helplessness, the analysis of variance was used for test of relationships with nominal data. The level of significance established for demonstration of a significant difference was ($p \leq 0.05$). Ethnic identity, marital status, education and most recent work position were considered at the nominal level of measurement. Education was considered nominal data because of the categorical values describing the variable. Length of time on the program, age, Katz ADL Index, subjective health, and social support (personal and phone contact) were considered interval data. These variables were described by values which represented increasing measures of the variable. Pearson correlation coefficients were calculated between these variables and helplessness and depression.

The shared contribution of the interval data variables in predicting the dependent variables of helplessness and depression were assessed through a regression analysis. With helplessness as the dependent variable, the combined effects of depression, age, length of stay on the program, subjective health, functional dependence, social contact and phone contact were examined using a step wise regression. The results of the statistical analysis described follow in the next chapter.

CHAPTER IV

RESULTS, DISCUSSION AND INTERPRETATION

Introduction

Since validity and reliability of the tools used is important to the credibility of the study findings, the analysis focuses first on the validity of the Geriatric Learned Helplessness Scale (GLHS) as demonstrated by a factor analysis. A discussion on the construct validity of the GLHS and reliability of both the GLHS and the Geriatric Depression Scale (GDS) follows.

To answer the first research question posed in the study, the results of the scales on learned helplessness and depression are described for each health care setting and together as a whole. Next, to answer the second research question, other variables are examined for possible relationships with helplessness and depression.

For all variables examined in the study, an "I don't know" and a "missing" value was incorporated to allow for accurate analysis. The high completion rate indicated that the responses to the questionnaires could be interpreted without having to explain missing values. There were 22 responses of "I don't know" and 4 "missing" responses out of a possible 2178 responses on the GLHS (<1%). The GDS had 8 "I don't know" and 11 "missing" responses out of a possible 2970 responses. Other questions were all answered. Those missing or "I don't know" values for the helplessness and depression scales were given a rating by taking the average of the responses for all the subject's individual scores. This meant that a missing value would be considered as an average of the other scores the subject gave, making the total possible score the same for all subjects. This high completion rate was probably due to the presence of the researcher.

Validity of the Geriatric Learned Helplessness Scale (GLHS)

The initial rotated factor loading matrix for the GLHS generated nine factors for the twenty two variables in the questionnaire (see Appendix I for initial factor matrix). It would have been desirable to have fewer factors, but perhaps if the study had a larger sample, a clearer simple structure for the factors might have emerged.

Those variables which did not load higher than 0.40 on any factor were omitted. Those factors that had an eigenvalue of greater than 1.0 were used in the analysis. (see Appendix J for listing of eigenvalues). Also, as those variables loading on more than one factor would not facilitate interpretation of the factors, they were removed. Variables 1, 5, 6, 7 & 9 were removed from the analysis for the above mentioned reason and a second factor analysis was done on the remaining variables in the GLHS. This second factor analysis generated seven factors. With this second factor analysis, two more items emerged as loading greater that 0.40 on two factors.

Since the low number of subjects could have contributed to the lack of clarity of the factors, it was decided to analyze the questionnaire for interpretability. This was done by loading all the items on the questionnaire and requesting the number of factors in a descending order. Each factor was then reviewed for interpretability. The factor analysis requesting six factors was most interpretable. Since this scale had items 5,11 and 19 that did not load greater than 0.40 on any factor and item 14 that loaded greater than 0.40 on two factors, these items were removed and a second factor analysis was done requesting six factors (see the Factor Loading Matrix, Appendix J).

The variables that loaded over r=0.40 for each factor on the second six-factor analysis were analyzed for an emerging theme or common concept. Only those factors which had an eigenvalue of greater than one were used in the analysis. The six factors accounted for 59% of the variance in the GLHS. The emerging concepts related to each factor were described as follows after carefully reviewing all items contributing to each factor.

Factor 1 Control: Helplessness in relation to perceived control over life events.

Factor 2 Generalization: Generalization of helplessness to other situations.

Factor 3 Others: Helplessness in relation to others.

Factor 4 Temporary Fate: Helplessness as something which is temporary and unpredictable.

Factor 5 Self-blame: It is something about me which causes this helplessness.

Factor 6 Transition: Helplessness as changing from repeated experiences.

Those variables on the questionnaire which related to each factor are identified below.

Factor 1 Control

Var 1 Do you often feel you are not in control of things that happen to you? (r=0.64)

Var 2 Do you feel less in charge of your life than you used to? (r=0.65)

Var 9 Do you often feel helpless? (r=0.66)

Var 12 Do you feel you can figure out the answers to most of your own problems? (r=0.51)

Factor 2 Generalization

Var 3 Do you think other people have more control over their life than you do? (r=0.54)

Var 4 Do you feel you are successful at most things you try? (r=0.71)

Var 6 Do you have any major plans for the future? (r=0.66)

Var 8 Do things usually turn out the way you planned? (r=0.50)

Factor 3 Others

Var 15 Do you feel that the bad things that happen to you could happen to anyone? (r=.61)

Var 18 Will you family or friends listen to you if you are worried about something? (r=.76)

Var 20 Do you feel that if you don't go along with other people's decisions, that you might not get help when you need it? (r=.81).

Factor 4 Temporary Fate

Var 7 Do you try something again even if you did not do it right the first time? (r=0.47)

Var 10 Do things go well more because of luck than because you make them go right? (r=0.83)

Var 16 Do you feel success has more to do with luck than with hard work? (r=0.76)

Factor 5 Self-blame

Var 13 When something goes wrong for you, do you usually blame yourself? (Helplessness is my problem. It is something about me which causes helplessness.) (r=0.69)

Var 21 Do you feel that people pay more attention to you when you need help than when you can do things for yourself? (My helplessness causes others to perceive me and behave towards me in different ways). (r=0.62)

Var 22 Do you find that as you get older, people try to make decisions for you without asking you what you think? (There is something particular about me (age), which contributes to other people's perception of my helplessness). (r=0.41)

Factor 6 Transition

Var 2 Do you feel less in charge of your life than you used to? (r=0.43).

Var 7 Do you try something again even if you did not do it right the first time? (r=0.41)

Var 17 Do you feel that as you get older, the less control you expect to have over your life?

Items 2 and 7 loaded on two factors. Item 2 loaded 0.65 on factor one and 0.43 on factor six. Understandably, this item would relate to both concepts of control (factor 1) and whether this has changed over time from repeated experiences (factor 6). Similarly, item 7 loaded 0.46 on factor four and 0.42 on factor six. This is explainable, since it is the repeated experiences with helplessness over time (factor 6) that may lead one to believe that fate may dictate helplessness (factor 4). If temporary fate (as opposed to stable personal control) decides whether one might be successful on a second attempt, then one may take a chance and try again.

The six concepts identified appeared to support the conceptual framework of learned helplessness in the sense that after repeated uncontrollable events (factor 6), one may come to perceive oneself as helpless (factor 1) and generalize this to situations where control is possible (factor 2). The tendency to generalize helplessness to other situations is dependent on whether the cause for helplessness is perceived as coming from within (factor 5) (e.g. it is some personal weakness) and whether this is a long term situation (factor 4) (e.g. stability as opposed to temporary fate). The perception of helplessness is reinforced by the influence one has in relationships with others (factor 3).

As noted in the literature review on learned helplessness, self-blame and long-term causes of helplessness combined with the severity of the helpless situation contribute to how helplessness is generalized. Undoubtedly, it is the combination of these factors that produces the overall perception of helplessness. It would therefore be difficult to separate these factors as discrete concepts. This was confirmed by the repeated attempts to make sense of the GLHS questionnaire using a factor analysis. Despite this, the last factor analysis presented provides a reasonably clear structure of the factors. If the GLHS was to be developed further, new items would be added to further describe each concept and current items clarified. Another study could be conducted to test and refine the GLHS further.

Since it was not the initial intent of this study to create a new scale, no further development of this scale was done. The remainder of the analysis for this study was done with the revised questionnaire (with items 5,11,14 and 19 removed) from which the remaining items produce one summary figure measuring learned helplessness. The total possible score range of the questionnaire was then 0 - 18.

To test for convergent validity of the revised GLHS, the correlation between learned helplessness and depression was assessed. The strength of the linear relationship was determined by the Pearson correlation coefficient which was 0.67 (p=.000). This supports the idea that the GLHS would demonstrate construct validity by correlating strongly with a scale which measures a similar concept. The correlation is consistent with the conceptual framework which indicates that depression may result from learned helplessness.

Reliability of the GLHS and the GDS

The GDS reliability coefficient (Cronbach's alpha) was 0.75. In other studies, the GDS has shown a high degree of internal consistency (Spearman-Brown formula split-half reliability coefficient of 0.94 and Cronbach's alpha coefficient of 0.94) (Yesavage, et al, 1983). The GLHS reliability coefficient alpha was 0.66 on the original scale and 0.62 on the revised scale. Although these are acceptable alpha levels, a higher level would be desirable. It is likely that these measures might improve if the size of the sample were increased. Another possible reason for the lower reliability is that the sample itself may involve a vulnerable group (ie. dependent on others for support and health care). If they feel unsure or helpless, they may give ambivalent responses. This would affect the consistency of responses. Since the researcher assisted with completion of the questionnaires for 92 people, responses might also have reflected what the subject thought was appropriate to indicate as opposed to what she actually felt.

Learned Helplessness and Depression in Three Health Care Settings

The mean scores and standard deviations on helplessness and depression were computed for each setting and together as a whole. Next an analysis of variance was done to see if there was any mean differences in helplessness and depression scores between the three health care settings

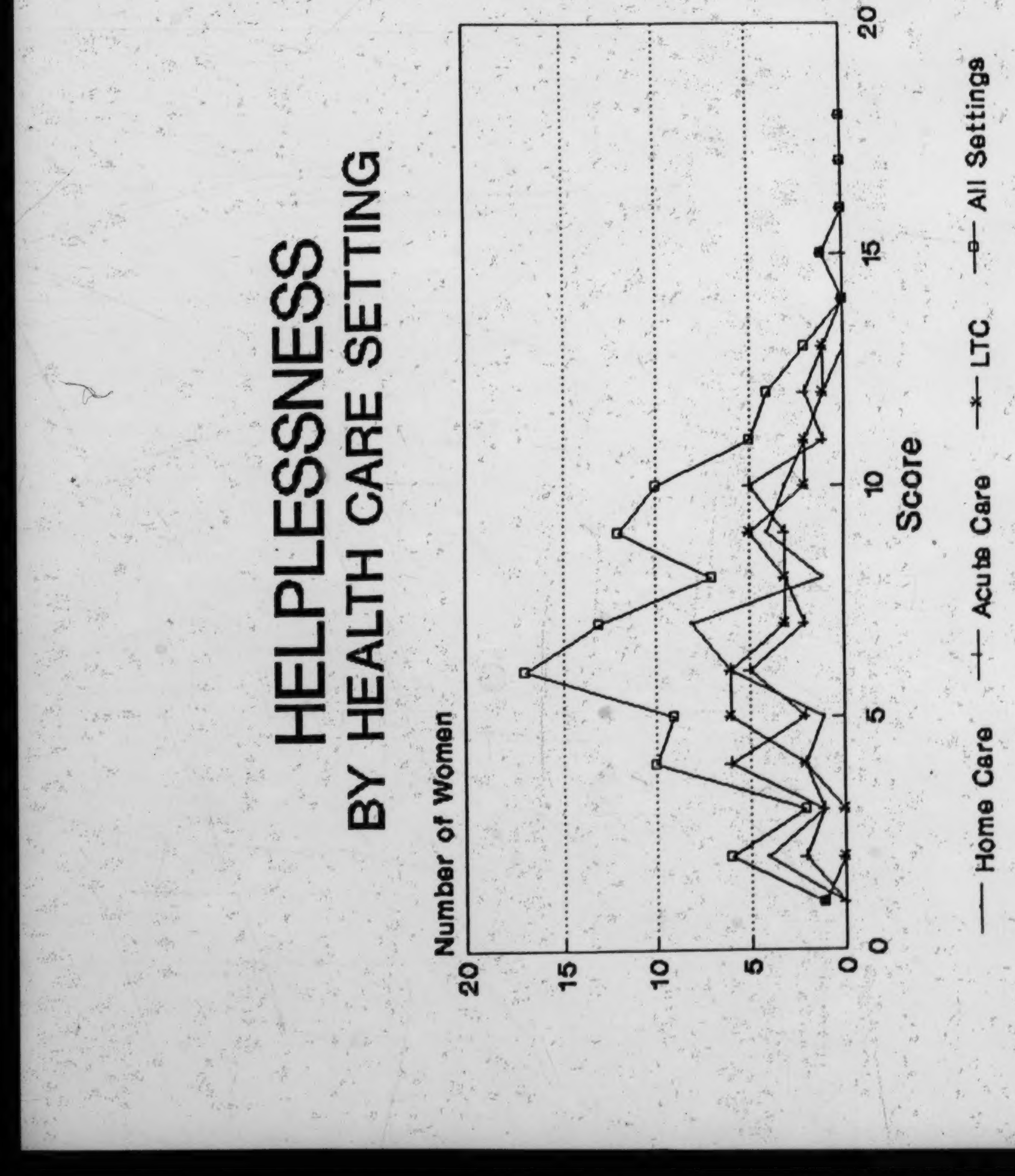
Table 4.1 summarizes the descriptive data on helplessness scores for the three health care settings. Figure 1 is a graphic presentation of the results of the GLHS in the three settings. With helplessness scores broken down into three categories of low (0-6), medium (7-12) and high (13-18), 58% of all respondents scored within the low range, 40% the medium range, and 1% the high range. The home care setting helplessness scores ranged 66%, 33% and 0% respectively from low to high. Similarly, the acute care setting scores ranged from (low to high) 55%, 45% and 0% respectively, while the long term care setting ranged from 55%, 42% and 3% respectively. These results indicated that the majority of the older women in all three health care centres reported low levels of helplessness. Women in the

Table 4.1

LEARNED HELPLESSNESS: Descriptive Results by Setting

	mean	standard deviation	range
Home Care	5.80	2.76	1-11
Acute Care	6.20	3.11	1-12
Long Term Care	6.60	3.00	0-14
All Settings	6.20	2.95	0-14

Figure 1. HELPLESSNESS BY HEALTH CARE SETTING



home care setting reported the lowest helplessness scores, while the institutional settings showed similar frequencies for helplessness. Very few women reported high levels of helplessness, while the range for medium helplessness scores was 33%, 45% and 42% for the home care, acute care and long term care setting respectively. The institutional settings showed higher trends of helplessness scores than did women in the home care setting. Moderate scores of helplessness need to be assessed further since there were no studies to indicate what might be a normal score for this age group. If the grand mean for helplessness (6.20) as well as the standard deviation (2.95) were interpreted as being normal and anything above the score of 9.00 were considered moderate to severe helplessness, then 22% of the women in all settings would have moderate to severe helplessness scores. This criteria applied to each setting revealed that 18% of the women studied in home care, 27% in acute care and 21% in long term care reported moderate to severe levels of perceived helplessness.

Despite reporting by women in the home care setting of the lowest helplessness results, an analysis of variance revealed there were no significant differences between mean scores on the GLHS across the three settings (F-ratio=0.60, DFH=2, DFE=96, P=0.55). Table 4.2 provides the analysis of variance results for helplessness by health care setting.

Table 4.2

HELPLESSNESS ANOVA RESULTS: by Health Care Setting

Source	DF	Sum of Sq	Mean Sq	F Ratio	Prob
Between Groups	2.0	10.45	5.22	0.60	0.55
Within Groups	96.0	839.64	8.75		
Total	98.0	850.09			

Table 4.3 provides a summary of descriptive results on depression scores (GDS) for the three health care settings. Figure 2 is a graphic presentation of GDS in the three settings.

With depression scores broken down into four categories of normal (0-10), mild (11-14), moderate(15-20) and severe (>21), 56% of respondents in all settings scored within the normal range, 22% the mild range, 19% the moderate range and 2% the severe range. The home care setting depression scores ranged from 61%, 24%, 15% and 0% respectively for the normal, mild, moderate and severe categories. Similarly, the acute care setting scores ranged from 52%, 24%, 21% and 3% respectively, while the long term care setting scores ranged from 58%, 18%, 21% and 3% respectively. These findings indicated a majority of women in all health care settings had normal to mild depression scores (78%). However, using a cutoff score of 15, 21% of the sample would be considered depressed. These results were similar to those in Snowdon and Donnelly's (1986) study on prevalence of depression in six nursing homes where it was found that 26% of residents were depressed using the same cut off score. Considered in these terms, the figure found in this study represents a high level of depression and addresses the unfortunate situation of older women who face increasing losses of a

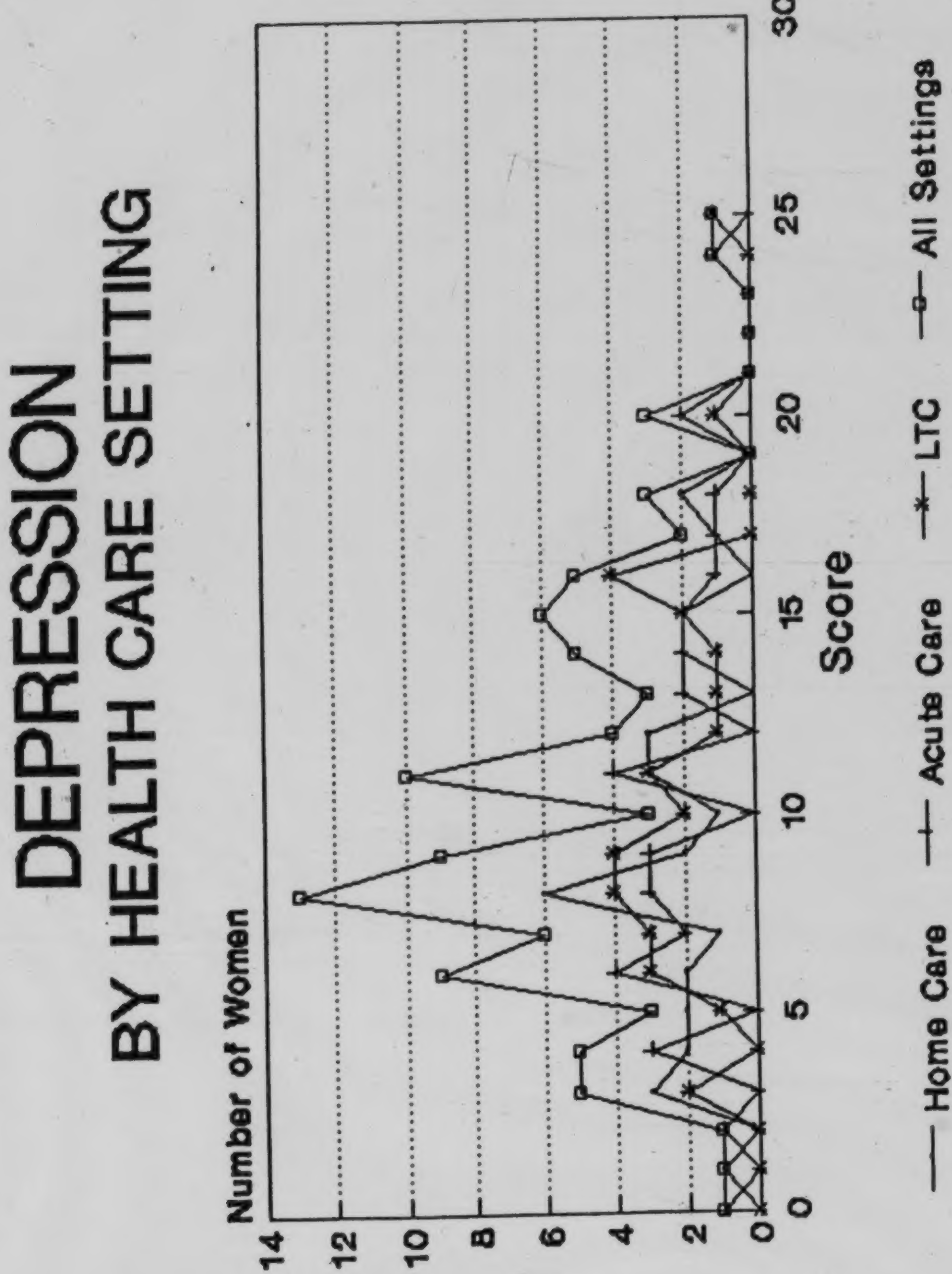
Table 4.3

DEPRESSION: Descriptive Results by Setting

DEPRESSION: Descriptive Results by Setting

	mean	standard deviation	range
Home Care	9.21	4.58	1-18
Acute Care	10.58	4.94	0-24
Long Term Care	10.67	5.79	3-25
All Settings	10.15	5.12	0-25

Figure 2. DEPRESSION BY HEALTH CARE SETTING



real and perceived nature. Of the two women with severe depression ratings, one woman had a (supposedly resolved) history of depression, while the other woman was suffering from a recent loss.

An analysis of variance was used to indicate whether or not the group means were significantly different. Although women in the home care setting had the lowest depression scores overall and the lowest mean score, an analysis of variance with depression as the dependent variable revealed there were no significant differences in mean depression scores for the samples across the three health care settings (F ratio=0.84, DFH=0.84, DFE=96, P=0.44). Table 4.4 provides a summary table for the analysis of variance results of depression by health care setting.

From Table 4.1, Table 4.3, Figure 1 and Figure 2, it can be seen that the trends were similar for all settings for depression and helplessness scores. Depression and helplessness considered together showed similar patterns. The majority of women in all settings were neither helpless nor depressed. Very few indicated high helplessness or severe depression. Those women who indicated moderate depression were of concern since the likelihood of being treated in the absence of clinical symptoms is poor.

Table 4.4

DEPRESSION ANOVA RESULTS: by Health Care Setting

Source	DF	Sums of Sq	Mean Sq	F Ratio	Prob
Between Groups	2.0	43.91	21.95	0.84	0.44
Within Groups	96.0	2516.79	26.22		
Total	98.0	2560.70			

Functional Dependence, Helplessness and Depression

The Katz Index of activities of daily living described six levels of increasing disability with the value 0 indicating independence and 6 indicating functional dependence in all six areas. Table 4.2 summarizes this data. Generally as a group, the majority of women were only mildly dependent with 74% having two or less areas of dependence. The 18% of the sample indicating functional independence may have been receiving care for medications and complex medical conditions. The Katz ADL measurement tool did not identify these areas of "knowledge" dependence and this makes it difficult to interpret these results. Such dependence could contribute to helplessness and depression. The frequency data and mean scores indicated that women in the acute care setting and long term care setting have higher functional dependence scores as a whole. As one might expect, home care had the lowest functional dependence scores since if care requirements were high, the person would possibly be admitted to a facility for care. Recently, in the province in which the study was conducted, with the increased home care program resources more people are able to stay home longer with increasing levels of disability. Unfortunately though, the demand for such services still far exceeds the resources needed to maintain people at home.

The chi-square analysis was used to identify whether there was a relationship between care setting and functional dependence. Although the frequency data in Table 4.2 indicated dependence was higher in the acute and long term care facility, the chi-square indicated there was no significant relationship (x sq= 14.23, p>0.05). These results should be used with caution however, because 50% of the cells had less that 5 observations.

To test if functional dependence (ADL) was significantly correlated to depression and helplessness, a Pearson correlation coefficient was calculated to test for the strength of the relationship. Results showed that functional dependence and depression were significantly correlated (Pearson r=0.31)(p=0.001) as was functional dependence and helplessness (Pearson r=0.26)(p=0.005). This means that the greater the functional dependence, the more likely that depression and helplessness would be greater.

Functional Dependence and Age as Covariates with Helplessness and Depression

Since functional status was significantly correlated to both helplessness and depression, and the mean age of subjects was significantly different between settings, the covariance of functional status and age with depression and helplessness was explored. The analysis of covariance of

Table 4.5

FUNCTIONAL DEPENDENCE: Descriptive Statistical Results

Functional Dependence by Health Care Setting

	Number of Functional Dependent Areas						
Settings	0	1	2	3	4	>4	Number
all settings	18%	40%	16%	7%	13%	15%	99
home care	21%	39%	27%	6%	6%	0%	33
acute care	21%	33%	12%	9%	12%	12%	33
long term	12%	49%	9%	6%	21%	3%	33

	Mean # of Dep. Areas	Standard Deviation	Range
All settings	1.7	1.46	0-6
Home Care	1.36	1.08	0-5
Acute Care	1.94	1.71	0-6
Long term	1.85	1.48	0-6

the Index of ADL and age was run with depression for each setting and again with learned helplessness for each setting. A probability of less than 0.05 was set as the acceptable level of significance.

The results of the analysis of covariance indicated that no statistically significant differences existed among the means of learned helplessness and depression in the three settings when adjusted for the effects of functional dependence and age ($p>0.05$). However, functional dependence and age were significant predictors of helplessness and depression ($p<0.05$). Table 4.6 and Table 4.7 provide a summary of the analysis of covariance for depression and helplessness with the effects of functional dependence and age adjusted.

Analysis of Other Variables Which Might be Related to Learned Helplessness and Depression

Ethnic identity, marital status, education and most recent work position were considered at the nominal level of measurement. Education was considered nominal data because of the categorical values describing the variable. An analysis of variance was done to test whether marital status, employment history, ethnic background, and education could account for any differences of the mean scores on the dependent variables of depression and helplessness. The level of significance established for demonstration of an acceptable difference was ($p\leq0.05$).

Table 4.6

Results of Analysis of Covariance where Depression is the Dependent Variable and the Covariates are Age and Functional Dependence

Source	DF	Sum of Sq	Mean Sq	F Ratio	Prob
Between Groups	2.0	17.71	8.86	0.37	0.69
Within Groups	94.0	2239.48	23.82		
Total	96.0	2257.19			

Table 4.7

Results of Analysis of Covariance where Helplessness is the Dependent Variable and the Covariates are Age and Functional Dependence

Source	DF	Sum of Sq	Mean Sq	F Ratio	Prob
Between Groups	2.0	10.45	5.22	0.60	0.55
Within Groups	96.0	839.64	8.75		
Total	98.0	850.09			

There were no significant differences found among mean depression scores for any of the above named variables. Similar results were found for learned helplessness when treated as the dependent variable by the same sociodemographic variables. These findings are suggestive that depression or helplessness means were not explained by the subject's marital status, ethnic origin, employment history or educational background.

Length of time on the program, age, Katz ADL Index, subjective health, and social support (personal and phone contact) were considered interval data. These variables were described by values which represented increasing measures of the variable. They were tested in relation to degree of LH and depression using the Pearson r for test of relationship. Depression and subjective health were significantly correlated (Pearson r= -.35) as was health and helplessness (Pearson r= -.34). These results suggest that the poorer the subjective health reported, the higher were both the levels of depression and helplessness.

Neither length of stay in the relative health care agency nor age were correlated to helplessness and depression. However, length of stay was significantly correlated to age (Pearson r=0.23) and health (Pearson r=.18). Functional dependence was significantly correlated to age (Pearson r=0.31). This makes sense, since as one gets older, the more frail one is likely to become and therefore the more likely one is to need health care longer.

As was mentioned earlier functional dependence was significantly correlated with helplessness (Pearson r=0.26) and depression (Pearson r=0.31). Social contact was also significantly correlated to depression (Pearson r=0.24) and helplessness (Pearson r=0.26), as was phone contact to depression (Pearson r=0.31) and helplessness (Pearson r=0.25). These results suggest that with increasing age, the more functionally dependent one will likely become. With increased functional dependence and perceived decreasing health, the likelihood of feelings of helplessness and depression increases. Also, the less social and phone contact, the more likely that feelings of helplessness and depression will increase. Interestingly, functional dependence and subjective health were not significantly correlated (Pearson r=-0.07, p=0.24). This means that a subject's perception about how healthy she was did not relate to how functionally dependent she was.

With helplessness as the dependent variable, the combined effects of depression, age, length of stay on the program, subjective health, functional ability, social contact and phone contact were examined using a regression analysis. Depression was found to be a significant predictor of helplessness (t= 8.39, p=0.00, Beta=0.65). Thus, the more depressed the person is, the more likely they are to have higher helplessness scores. Health approached significance in the regression equation (p= 0.09). See the correlation matrix in Appendix L for further detail.

The step-wise regression results show that 42% (R sq=0.42) of the variance in GLHS measure of helplessness can be explained by the measure of depression. A multiple regression was done with the same variables (age, length of stay, subjective health, social and phone contact, and functional dependence) and helplessness, with depression as the dependent variable. Results revealed similarly that helplessness significantly predicted depression and contributed to 42% of the variance in depression. Interestingly, subjective health, phone contact and functional ability approached significance in the regression equation (p = 0.09, 0.07 & 0.07 respectively). Neither functional ability or phone contact approached significant prediction of helplessness when used as the dependent variable in the multiple regression (see Appendix M for the Regression Analysis Matrix).

The unexplained variation in helplessness and depression could be explained because both may affect people randomly, or the questionnaires do not include sufficiently valid and reliable questions, or sufficiently discriminatory questions have not been included in the analysis. The unexplained variation could also be due to the reliability of responses to helplessness and depression questions.

Summary of Results

The following is a summary of the important findings in the study.

1. No significant differences in sociodemographic variables were found initially between groups (except length of stay and phone contact).
2. The GLHS was interpretable using a factor analysis of six factors and 18 variables. These factors explained 59% of the variance in the GLHS.
3. The majority of women in all settings scored within normal ranges on helplessness and depression scales (58% and 78% respectively), while 40% and 19% scored within a medium ranges respectively and 1% and 3% scored within the severe ranges of helplessness and depression respectively.
4. Non-significant trends of lower to higher mean helplessness and depression scores were found from home care to acute care and finally long term care.
5. There were no significant differences in mean scores in helplessness and depression for the three health care settings.
6. There were no significant differences in mean scores in helplessness and depression for the three health care settings with the functional status and age controlled. However, functional dependence and age significantly predicted both helplessness and depression.
7. Functional status, subjective health, social contact and

phone contact were significantly correlated to depression and helplessness.

8. Neither length of stay in the respective health care agency nor age were correlated to helplessness and depression, but they were significantly correlated to functional dependence.

9. Helplessness and depression means were not significantly explained by the subject's marital status, ethnic origin, employment history or educational background.

10. Helplessness and depression scores were significantly correlated. Helplessness alone accounted for 42% of the variance in depression in a stepwise multiple regression table by depression with helplessness, age, subjective health, functional dependence, length of stay, social contact and phone contact. Similarly, depression significantly accounted for 42% of the variance in helplessness in the same regression equation, only with depression as part of the equation, and helplessness as the dependent variable.

Discussion

Overall, helplessness and depression ratings for each health care setting were within normal ranges. Women with moderate ratings were of some concern, since the clinical manifestations of depression or helplessness were not apparent and would likely go untreated. Women with severe ratings were noticeable and more than likely would have eventually had some form of intervention even if the researcher had not brought this to the attention of the staff. The rating of moderate depression and helplessness for all settings suggested that the effects of loss with aging are experienced generally in these three settings, even in the community where autonomy can be exercised to the greatest extent.

Findings of this study indicated that although there was a trend towards increasing levels of helplessness and depression from home care to both institutional types of care, this trend was not significant. Women receiving home care would likely feel the least helpless or depressed because of the less restrictive surroundings. The reason women in acute care had lower mean depression and helplessness scores than those in long term care, might be because they knew the hospital stay would be temporary. The women in the long term care facility, on the other hand, had little chance of going back to the community and this might have affected the higher mean scores in helplessness and depression. Although the tendency to generalize helplessness to other situations might give an indication of how much hope a person had for the future, other studies should be carried out to assess the element of hope for its effect on related concepts more specifically.

With the effects of functional status and age controlled, there continued to be no significant differences noted for helplessness and depression between settings. This meant, that if functional dependence and age were the same for all three settings, there would be no difference in helplessness and depression scores between settings. It may be that there were too few subjects in each setting to show a significant difference. Helplessness and depression are likely complex conditions affected by multiple variables, so the effect of one variable is hard to isolate. Although the intent of the study was to assess and control for other variables that may affect helplessness and depression, it is difficult to control for the impact of many variables in a clinical setting. Perhaps also, there are too many other variables such as relationships with people in the setting, forced routines and the physical environment which should have been studied separately as components which contribute to a setting. These components may need to be isolated and studied to gain understanding of the impact of a health care setting on feelings such as helplessness and depression.

Other factors throughout all settings seemed to increase the likelihood that depression and helplessness would increase. These included increasing functional dependence, poorer subjective health, and decreasing social (personal and telephone) contact. The older the women were, the more likely they were to stay longer on the health care program and be more functionally dependent. The more functionally dependent and the poorer the subjective health, the more likely helplessness and depression levels would be higher. The greater the functional dependence the poorer the subjective health would be. The less you can do for yourself and the more one has to rely on others to perform activities of daily living, the more helpless one would likely feel, and the more depressed one would likely become. The less social contact one received, the more likely one would feel depressed and lonely.

Non-significant trends revealed women in acute care had higher functional dependence, than women in long term care and finally home care. Although functional status significantly predicted the presence of helplessness and depression in all settings, the difference in functional dependence between settings was not enough to show a difference in helplessness and depression between settings.

One still is left with the question of why, despite similar levels of functional dependence, psychologically, some people handle disability better. They do not perceive themselves as helpless, nor do they become depressed. It might be a positive attitude or element of hope that would affect this helpless perception of themselves. Hope, as is indicated in the literature review, may relate to depression and is affected by the severity and length of the helpless situation and the tendency to blame oneself. Maybe this attitude carries beyond walls of routines and forced dependence. These results suggested however, that depression may be significantly related to helplessness (perceived and real) and real functional dependence. If helplessness is related to an attitude (e.g. self-blame), and attitudes are long standing characteristics that do not change easily (despite changing circumstances), then the effect of the health care setting would not produce differences between the groups on helplessness and depression.

CHAPTER FIVE

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

The objective of this study was to describe learned helplessness and depression in older women in three different health care settings. These health care settings were acute care, long term care and home care. The majority of women in all settings scored within normal ranges for depression and helplessness while very few scored within the severe ranges. Of the women in all settings, 40% scored within the moderate range for helplessness, while 19% fell within the moderate range for depression. The trend was for women on home care to have the lowest mean scores on helplessness and depression, followed by women in acute care and then those in long term care. There were no significant differences in mean scores for helplessness and depression between health care settings even when the effect of functional dependence was removed.

Scores on the helplessness and depression scales were significantly correlated. A step wise regression analysis with helplessness as the dependent variable and depression, subjective health, age, functional dependence, length of stay, and social and phone contact in the regression equation revealed helplessness accounted for 42% of the variance in depression. Similarly, depression accounted for 42% of the variance in helplessness when helplessness was part of the regression equation with the same variables listed above. All variables that were significantly related to helplessness were significantly related to depression as well. This supported the theoretical relation of the two concepts in that helplessness may lead to depression. The construct validity of the helplessness scale was supported by its correlation with depression as a related concept.

The six concepts identified in the Geriatric Learned Helplessness Scale (GLHS) were interpretable and support the conceptual framework of learned helplessness. Although the alpha reliability coefficients of 0.75 for the GDS and 0.60 for the revised GLHS were acceptable, a higher level would be desirable.

A nonsignificant trend was noted for functional dependence to be greatest in acute care, then followed by long term care, and finally home care. Although there was a significant correlation between functional dependence and helplessness and depression, the difference in functional dependence between settings did not yield a difference between settings on helplessness and depression.

The results of analysis of the relationship of other variables with helplessness and depression suggest that one becomes more functionally dependent with increasing age. With increased functional dependence and perceived decreasing health, the likelihood of feelings of helplessness and depression increased. Also, the less social and phone contact, the more likely were feelings of helplessness and depression. Findings also indicated that depression and helplessness means were not explained by the subject's marital status, ethnic origin, employment history or educational background.

Limitations of the Study

1. Though much effort was used in trying to strengthen internal validity of the study through study design (e.g. sampling procedures to make the sample groups as comparable as possible, consistent research techniques), it is difficult to control for effects of other variables in a clinical setting and threats to internal validity may have occurred.
2. Because convenience sampling was used in this study, caution should be used when making generalizations to a larger population of which this sample may not be representative.
3. Other threats to the external validity of this study included the possibility of the Hawthorne effect, where subjects may have changed responses to the questionnaire because they were being studied, and because most filled out the questionnaire with the help of the researcher. If such an effect occurred, it is likely that the effects would have existed for all subjects. Similarly if researcher bias was present as a second threat, it would have been consistent for all subjects because the same researcher was present

throughout the study.

4. The GLHS requires further revision and analysis to improve reliability and validity before it can be used in other studies.

Implications for Nursing

The findings of this study have implications for nursing practice, research, education and administration. The relatively high rates of moderate depression and helplessness scores indicate that there is much more research needed and that attention needs to be paid to these clients. These clients would not display clinical symptoms that would normally be noted and treated, and therefore more discerning screening tests must be developed to identify these clients. Also, nursing practice must allow opportunities for older clients to increase feelings of control and effectiveness to prevent helplessness and depression. Both learned helplessness and depression were correlated to functional dependence, subjective health, and social contact (phone and personal). With this knowledge, nurses can identify factors that may contribute to helplessness and depression and assist clients in ways that will help them avoid such problems.

The findings of this study may also have implications for nursing education. Knowledge of the prevalence and contributing factors to helplessness and depression will assist students to understand more about how important it is to encourage self-care for older adults and the importance of functional independence can contribute in the client's well being. Nursing administration is often responsible for allocation of resources, so from the findings of this study, decisions to allocate increased resources for programs that would enhance opportunities for independence, control and social interaction could be justified.

Recommendations for Study

There is a need to further develop the geriatric learned helplessness scale to increase its validity and reliability. This could be done by adding more variables to each factor and testing the scale with another group of older adults. Repeated factor analysis and reliability tests with other samples should be done until the tool yields satisfactory levels of reliability and validity. Mixed gender and male samples should also be used in future studies of this type. Also, further tests need to be done to estimate normal and abnormal score ranges. Further, there is a need to study certain aspects of the setting that may contribute to learned helplessness and depression. These aspects should have a narrow, more clearly defined scope of investigation. Such areas could be nurse's helping behaviours, the rigidity of routines, the promotion of a home-like atmosphere within a facility setting, and the opportunity for growth and experiential programs or events.

Another area that needs exploration is the effect of hope and the effect of long term conditions on helplessness and depression. Although the functional status of clients was assessed in this study, the chronicity of the status was not indicated. Despite the functional status, there seems to be an element of hope that affects the probability and severity of helplessness and depression. Although hope might be assumed through the tendency of one to generalize helplessness to other situations, hope might be assessed more directly in future studies.

Summary

Older people experience many losses and when assistance with health care is required, this may be viewed as another loss of independence. Nurses care for older women in many health care settings. The objective of this study was to investigate learned helplessness and depression in older women in three different health care settings. The three settings were home care, acute care and long term care. Ninety-nine women agreed to participate with thirty three per setting using a convenience sampling technique. The subjects were tested on depression using the Geriatric Depression Scale and learned helplessness using a Geriatric Learned Helplessness Scale developed by the researcher. Functional dependence was assessed to control for and to assess its affect on depression and helplessness. Other factors which might relate to depression and helplessness were also investigated.

The findings in this study revealed that the majority of women in the three health care settings had average to mild ratings of helplessness and depression, very few had severe ratings, and 40% fell within the moderate range for helplessness and 19% for depression. There was a non-significant trend for women in home care have to lowest mean scores on both variables, with women in acute care next and those in long term care last. There continued to be no significant differences between settings for these variables with the effect of functional dependence and age removed. Other factors found to be significantly correlated to both depression and helplessness were functional dependence, subjective health and social contact (phone and personal). Helplessness and depression were not explained by educational status, ethnic origin, marital status or employment history. Helplessness and depression were significantly correlated and accounted for 42% of the variance for each other when treated as a dependent variable in a regression equation.

Because of the sampling method used and the possible Hawthorne effect produced by the presence of the researcher throughout 92% of the questionnaire completion, a limitation of this study relates to its external validity. Also, the learned helpless scale requires further development and refinement to increase reliability and validity of the tool. Implications for nursing practice, research, administration and education were discussed. Further research that could be done in relation to this study are effects on learned helplessness and depression related to nurse's helping behaviours, the rigidity of routines, the promotion of a home-like atmosphere within a facility setting, and the presence of social programs. Another area that needs exploration is the effect of hope and the effect of long term conditions on helplessness and depression.

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APPENDIX A

THE MENTAL STATUS QUESTIONNAIRE

Following are ten questions. If the person accurately answers the question, a score of 1 is given for that question. The total score is summed and tabulated from a total of 10. Read each question carefully and allow the respondent time to answer. Jot down the respondents answer to allow for verification of scoring.

Subject Number ______________

Score

1. What is the name of this place?______________ _____
2. Where is it located?______________ _____
3. What day is today?______________ _____
4. What month is it now?______________ _____
5. What year is it now?______________ _____
6. How old are you?______________ _____
7. In what month were you born?______________ _____
8. In what year were you born?______________ _____
9. Who is the prime minister of Canada?______________ _____
10. Who was the prime minister before him?______________ _____

Total Score _____

Date:__________ Investigator______________

APPENDIX B

Referral Form for the Study: "Learned Helplessness and Depression in Older Women in Three Health Care Settings"

Name:____

Location:____
____
____

Date of Birth____

Please indicate if the above stated person meets the following subject criteria for this study:

	Yes	No
Is female....................................	____	____
Understands the English Language	____	____
Speaks the English Language...................	____	____
Is able to hear..............................	____	____
Is greater than 65 years of age..............	____	____
Is orientated to date, time and place and is able to respond to a questionnaire......	____	____
_If_ in a long term care institution, has been a resident for greater than six weeks, and has a patient classification level between A to D.........................	____	____
_If_ in an acute care setting, has been admitted for over a period of three and a half weeks...	____	____
_If_ at home receiving Home Care services, has been assessed as requiring long term care institutionalization if Home Care Services were not provided............................	____	____

Referring Person's Name______________________________

Date_________________________

APPENDIX C

Katz Index of Independence in Activities of Daily Living
(Index of ADL)

Number______________________________ Day of evaluation ______

For each area of functioning listed below, check the description that applies. (The word "assistance" means supervision, direction, or personal assistance.)

Bathing--either sponge bath, tub bath, or shower

[ ]	[ ]	[ ]
Receives no assistance(sits in out of tub by self if tub is usual means of bathing)	Receives assistance in bathing only one part of the body (such as back or a leg)	Receives assistance in bathing more than one part of body.

Dressing--gets clothes from closets and drawers--including underclothes, outer garments and using fasteners (including braces if worn)

[ ]	[ ]	[ ]
Gets clothes and gets completely dressed without assistance	Gets clothes and gets dressed without assistance except for assistance in untying shoes	Receives assistance in getting dressed or stays partly or completely undressed.

Toileting--going to the "toilet room" for bowel and urine elimination; cleaning self after elimination, and arranging clothes.

[ ]	[ ]	[ ]
Goes to "toilet room", cleans self, and arranges clothes without assistance (may use object for support such as cane, walker, or wheelchair and may manage night bedpan or commode, emptying same in morning)	Receives assistance in going to "toilet room" or in cleansing self or in arranging clothes after elimination or in use of night bedpan or commode	Doesn't go to room termed toilet for the elimination process.

Transfer--

[ ] Moves in and out of bed as well as in and out of chair without assistance (may use object for support such as cane or walker)	[ ] Moves in and out of bed or chair with assistance	[ ] Doesn't get out of bed.

Continence--

[ ] Controls urinating bowel movement completely by self	[ ] Has occasional "accidents"	[ ] Supervision helps keep urine or bowel control; catheter is used or is incontinent

Feeding--

[ ] Feeds self without assistance	[ ] Feeds self except for getting assistance in cutting meat or buttering bread	[ ] Receives assistance in feeding or is fed partly or completely by using tubes or I.V. fluid.

Definitions of Functional Independence and Dependence

Independence means without supervision, direction, or active personal assistance, except as specifically noted below. This is based on actual status and not on ability. A patient who refuses to perform a function is considered as not performing the function, even though he is deemed able.

Bathing

Independent: assistance only in bathing a single part (as back or disabled extremity) or bathes self completely.
Dependent: assistance in bathing more than one part of body; assistance in getting in or out of tub or does not bathe self.

Transfer

Independent: moves in and out of bed independently and moves in and out of chair independently (may or may not be using mechanical supports)
Dependent: assistance in moving in or out of bed and/or chair; does not perform one or more transfers.

chair; does not perform one or more transfers.

Dressing

Independent: gets clothes from closets and drawers; puts on clothes, outer garments, braces; manages fasteners; act of tying shoes is excluded

Dependent: does not dress self or remains partly undressed

Continence

Independent: urination and defection entirely self-controlled.

Dependent: partial or total incontinence in urination or defecation; partial or total control by enemas, catheters, or regulated use of urinals and/or bedpans.

Going to toilet

Independent: gets to toilet arranges clothes; cleans organs of excretion (may manage own bedpan used at night only and may or may not be using mechanical supports).

Dependent: uses bedpan or commode or receives assistance in getting to and using toilet.

Feeding

Independent: gets food from plate or its equivalent into mouth (precutting of meat and preparation of food, as buttering bread, are excluded from evaluation)

Dependent: assistance in act of feeding (see above): does not eat at all or parenteral feeding

INDEX OF ACTIVITIES OF DAILY LIVING

0 = Independent in all six functions (bathing, dressing, feeding, continence, transfer, toileting)
1 = Independent in five functions and dependent in one function
2 = Independent in four functions and dependent in two functions
3 = Independent in three functions
4 = Independent in two functions and dependent in four functions
5 = Independent in one function and dependent in five functions
6 = Dependent in all functions

Appendix D, Learned Helplessness Scale, (pp 114 and 115) has been removed due to the unavailability of copyright permission.

DATE:

APPENDIX E

GERIATRIC LEARNED HELPLESSNESS SCALE (GLHS)

PLEASES CHOOSE THE BEST ANSWER FOR HOW YOU HAVE FELT OVER THE PAST WEEK. MAKE AN 'X' OVER THE YES OR NO.

NUMBER______________

1. DO YOU OFTEN FEEL YOU ARE NOT IN CONTROL OF THINGS THAT HAPPEN TO YOU?....................YES OR NO
2. DO YOU FEEL LESS IN CHARGE OF YOUR LIFE THAN YOU USED TO?...................................YES OR NO
3. DO YOU THINK OTHER PEOPLE HAVE MORE CONTROL OVER THEIR LIFE THAN YOU DO?........................YES OR NO
4. DO YOU FEEL YOU ARE SUCCESSFUL AT MOST THINGS YOU TRY?...................................YES OR NO
5. DO YOU OFTEN LET OTHER PEOPLE MAKE DECISIONS FOR YOU ?...................................YES OR NO
6. DO YOU HAVE ANY MAJOR PLANS FOR THE FUTURE?....YES OR NO
7. DO YOU TRY SOMETHING AGAIN EVEN IF YOU DID NOT DO IT RIGHT THE FIRST TIME?.................YES OR NO
8. DO THINGS USUALLY TURN OUT THE WAY YOU PLANNED? .... YES OR NO
9. DO YOU OFTEN FEEL HELPLESS?....................YES OR NO
10. DO THINGS GO WELL MORE BECAUSE YOU MAKE THEM GO RIGHT THAN BECAUSE OF LUCK?................YES OR NO
11. HAVE MANY THINGS BEEN GOING WRONG RECENTLY?....YES OR NO

12. DO YOU FEEL YOU CAN FIGURE OUT THE ANSWERS TO
MOST OF YOUR OWN PROBLEMS?....................YES OR NO

13. WHEN SOMETHING GOES WRONG FOR YOU, DO YOU USUALLY
BLAME YOURSELF?................................YES OR NO

14. DO THE THINGS YOU THINK ARE IMPORTANT
MATTER TO OTHER PEOPLE?........................YES OR NO

15. DO YOU FEEL THAT THE BAD THINGS THAT HAPPEN TO YOU COULD
HAPPEN TO ANYONE?..............................YES OR NO

16. DO YOU FEEL SUCCESS HAS MORE TO DO WITH LUCK THAN
WITH HARD WORK?................................YES OR NO

17. DO YOU FEEL THAT AS YOU GET OLDER, THE LESS
CONTROL YOU EXPECT TO HAVE OVER YOUR LIFE?.....YES OR NO

18. WILL YOUR FAMILY OR FRIENDS LISTEN
TO YOU IF YOU ARE WORRIED ABOUT SOMETHING?.....YES OR NO

19. DO YOU FEEL THAT NO MATTER WHAT YOU DO, IF YOU ARE
GOING TO GET SICK, YOU WILL GET SICK?..........YES OR NO

20. DO YOU FEEL THAT IF YOU DON'T GO ALONG WITH OTHER
PEOPLE'S DECISIONS, THEN YOU MIGHT NOT GET HELP
WHEN YOU NEED IT?.............................YES OR NO

21. DO YOU FEEL THAT PEOPLE PAY MORE ATTENTION TO YOU WHEN
YOU NEED HELP THAN WHEN YOU CAN DO THINGS FOR
YOURSELF?.....................................YES OR NO

22. DO YOU FIND THAT AS YOU GET OLDER, PEOPLE MAKE DECISIONS
FOR YOU WITHOUT ASKING YOU WHAT YOU THINK?.....YES OR NO

APPENDIX F

GERIATRIC DEPRESSION SCALE (GDS)

PLEASE CHOOSE THE BEST ANSWER - YES OR NO - FOR HOW YOU HAVE FELT OVER THE PAST WEEK. MAKE AND 'X' OVER YOUR ANSWER.

NUMBER________________ DATE:______________

1. ARE YOU BASICALLY SATISFIED WITH YOUR LIFE?... YES or NO
2. HAVE YOU DROPPED MANY OF YOUR ACTIVITIES AND INTERESTS:.................................YES or NO
3. DO YOU FEEL THAT YOUR LIFE IS EMPTY?...........YES or NO
4. DO YOU OFTEN GET BORED?........................YES or NO
5. ARE YOU HOPEFUL ABOUT THE FUTURE?.............YES or NO
6. ARE YOU BOTHERED BY THOUGHTS YOU CAN'T GET OUT OF YOUR HEAD?................................YES or NO
7. ARE YOU IN GOOD SPIRITS MOST OF THE TIME?......YES or NO
8. ARE YOU AFRAID THAT SOMETHING BAD IS GOING TO HAPPEN TO YOU?.............................YES or NO
9. DO YOU FEEL HAPPY MOST OF THE TIME?............YES or NO
10. DO YOU OFTEN FEEL HELPLESS?..................YES or NO
11. DO YOU OFTEN GET RESTLESS AND FIDGETY?........YES or NO
12. DO YOU PREFER TO STAY AT HOME, RATHER THAN GOING OUT AND DOING NEW THINGS?................YES or NO
13. DO YOU FREQUENTLY WORRY ABOUT THE FUTURE?.....YES or NO
14. DO YOU FEEL YOU HAVE MORE PROBLEMS WITH MEMORY THAN MOST?....................................YES or NO

15. DO YOU THINK IT IS WONDERFUL TO BE ALIVE NOW?
....YES or NO

16. DO YOU OFTEN FEEL DOWNHEARTED AND BLUE?.......YES or NO

17. DO YOU FEEL PRETTY WORTHLESS THE WAY YOU ARE NOW?
....YES or NO

18. DO YOU WORRY A LOT ABOUT THE PAST?............YES or NO

19.DO YOU FIND LIFE VERY EXCITING?................YES or NO

20. IS IT HARD FOR YOU TO GET STARTED ON NEW PROJECTS?
....YES or NO

21. DO YOU FEEL FULL OF ENERGY?...................YES or NO

22. DO YOU FEEL THAT YOUR SITUATION IS HOPELESS?..YES or NO

23. DO YOU THINK THAT MOST PEOPLE ARE BETTER OFF
THAN YOU ARE?.....................................YES or NO

24. DO YOU FREQUENTLY GET UPSET OVER LITTLE THINGS?
....YES or NO

25. DO YOU FREQUENTLY FEEL LIKE CRYING?...........YES or NO

26. DO YOU HAVE TROUBLE CONCENTRATING?............YES or NO

27. DO YOU ENJOY GETTING UP IN THE MORNING?.......YES or NO

28. DO YOU PREFER TO AVOID SOCIAL GATHERINGS?.....YES or NO

29. IS IT EASY FOR YOU TO MAKE DECISIONS?.........YES or NO

30. IS YOUR MIND AS CLEAR AS IT USED TO BE?.......YES or NO

APPENDIX G

CONSENT FORM

Title of Project: Learned helplessness and depression in older women in three health care settings.

RESEARCHER DOING THIS STUDY IS:	THE FACULTY SUPERVISOR IS:
CHRISTINA BURTON	DR. JANET KERR
MASTERS OF NURSING STUDENT	PROFESSOR
FACULTY OF NURSING	FACULTY OF NURSING
UNIVERSITY OF ALBERTA	UNIVERSITY OF ALBERTA
PHONE: 434-4265	PHONE: 492-6253

PURPOSE OF THE STUDY:

I am a graduate student in Nursing and I am doing a study that investigates how in charge of their life women feel they are. How happy or unhappy these women are will also be studied. Women who are in one of three different places will be studied. These places will be at home, in a hospital and in an extended care home for the elderly. I hope results of the study will help health care workers understand how patients need control. Also, the study may show how different places affect the amount of control a person feels.

PROCEDURES

If you decide to be in the study, I will begin by asking you ten short questions to test your memory. If you have difficulty with this, I will not continue asking you other questions. If I do continue asking you questions, the next set of questions will be on how you are physically able to take care of yourself. I will ask you to show me how well you can move certain parts of your body. A questionnaire will be used to find out how in charge you feel you are over your life. Another questionnaire will be used to screen you for depression. If in the course of answering the questions, I am worried about how depressed you are, I will tell you and the nursing supervisor about these concerns. I will make an appointment with you to be with you when you are answering the sets of questions. If you need any help in reading the questions, writing out the answers, or in understanding the questions, the researcher will be with you to help. You may ask for help at any time. Answering the questions should take about 30 - 40 minutes. There is no risk to the patient involved in answering the questions.

VOLUNTARY PARTICIPATION

I want you to know that you do not have to be in this study if you do not want to. If you decide to be in the study, you can drop out at any time by telling me you do not want to continue with the study. No one will hold that against you. The care you receive from the health care program won't change if you are or are not in this study.

CONFIDENTIALITY

Your name and what you say and do will be kept confidential. Any articles or talks about this study will not describe you as an individual. Your records from this study will not be marked with your name but only with a number. Anything marked with a name will be burned after the study is completed. All records will be kept locked in a drawer that only the researcher has access to. In other words, no one will be able to know who answered the questionnaire. Your nurses and doctors will not see or hear about your records from this study, unless you want to speak about it with them yourself. If while answering the depression questionnaire I am worried about you being depressed, only you and the head nurse will be told.

The researcher will be happy to answer any questions you have. If you have any questions later, you can contact the researcher, Christina Burton or the study supervisor Dr. Janet Kerr (addresses and phone numbers are on the front page).

PARTICIPANT'S STATEMENT:

I have read this information, or someone has described it to me. I give my consent to be involved in the study "How health care settings affect learned helplessness and depression in older women."

Signature of patient_____________________________ Date_______

Person who explained the study _________________________

Subject I.D.#______

APPENDIX H

SUBJECT DATA SHEET

PLEASE TRY TO ANSWER ALL OF THE QUESTIONS WHICH APPLY TO YOU. MOST OF THE QUESTIONS CAN BE ANSWERED BY CIRCLING THE NUMBER NEXT TO THE ANSWER YOU CHOOSE OR BY WRITING IN THE BLANK PROVIDED.

1. WHAT IS YOUR AGE (in years)? ____________

2. MARITAL STATUS:

MARRIED................1

WIDOWED................2

SEPARATED OR DIVORCED..3

SINGLE.................4

3. CURRENTLY, WHERE ARE YOU LOCATED?

AT HOME OR LODGE...................1

IN A LONG TERM CARE INSTITUTION....2 NAME______________

IN A HOSPITAL......................3 NAME______________

4. HOW LONG HAVE YOU BEEN ADMITTED TO THE CURRENT HEALTH CARE PROGRAM YOU ARE ON?

YEARS__________ MONTHS_________ WEEKS___________

5. WHAT POSITION OF WORK DID YOU HOLD IN THE LAST FIVE YEARS OF EMPLOYMENT? (PLEASE WRITE THE MAIN ONE)

___________________________________.........1

WAS NOT EMPLOYED OUTSIDE THE HOME.......2

7. WHAT IS YOUR ETHNIC ORIGIN? (ONLY THE MAIN ONE)

EUROPEAN...............1
EAST ASIAN.............2
ORIENTAL...............3
AFRICAN................4
INDIA AND SOUTH
EAST ASIA..............5
NORTH AMERICAN.........6
SOUTH AMERICAN.........7
NATIVE AMERICAN........8
OTHER..................9

8. WHAT WAS THE HIGHEST LEVEL OF EDUCATION THAT YOU HAVE REACHED?

NONE................................1
GRADE ONE TO FIVE...................2
GRADE SIX TO NINE...................3
GRADE TEN TO TWELVE.................4
COLLEGE OR UNIVERSITY DEGREE.......5

9. GENERALLY HOW HEALTHY DO YOU FEEL?

POOR..............1
FAIR..............2
GOOD..............3
EXCELLENT.........4

10. HOW OFTEN DO YOU USUALLY SEE FRIENDS OR RELATIVES?

ONCE A DAY OR MORE............1
EVERY FEW DAYS................2
ONCE A WEEK...................3
LESS THAN EVERY TWO WEEKS.....4

11. HOW OFTEN DO YOU TALK ON THE TELEPHONE?

ONCE A DAY OR MORE.............1
EVERY FEW DAYS.................2
ONCE A WEEK....................3
LESS THAN EVERY TWO WEEKS......4

THANK YOU VERY MUCH FOR ANSWERING THESE QUESTIONS.
AS PROMISED, YOUR ANSWERS WILL BE KEPT STRICTLY CONFIDENTIAL. IN REPORTS, INDIVIDUAL RESPONSES WILL NOT BE AVAILABLE, ONLY GROUP AVERAGES WILL BE USED IN MY REPORT. PLEASE GIVE THIS QUESTIONNAIRE TO THE RESEARCHER WHO GAVE IT TO YOU

APPENDIX I

GERIATRIC LEARNED HELPLESSNESS SCALE FACTOR ANALYSIS WITH NINE FACTORS GENERATED

	FACTOR								
VAR	1	2	3	4	5	6	7	8	9
1	0.53	-0.14	0.12	0.06	0.25	0.45	0.14	-0.14	-0.22
2	0.05	0.00	-0.15	-0.10	0.07	0.80	0.23	0.21	0.08
3	0.61	0.00	-0.14	0.26	-0.08	0.34	-0.08	0.24	0.05
4	0.76	0.23	-0.05	0.01	-0.15	-0.05	0.08	-0.03	0.05
5	0.24	-0.26	0.19	0.48	0.52	-0.19	0.03	0.10	0.18
6	0.46	-0.08	0.00	-0.02	0.14	-0.01	-0.34	0.00	0.60
7	0.06	0.03	0.46	0.18	-0.35	0.02	0.54	-0.15	0.17
8	0.68	0.03	0.31	-0.14	0.31	0.05	0.11	0.10	-0.08
9	0.17	-0.03	-0.12	0.07	0.55	0.42	-0.12	0.05	0.09
10	0.04	-0.13	0.84	-0.06	-0.00	-0.00	-0.13	0.08	-0.06
11	0.14	0.11	-0.07	-0.09	0.07	0.17	0.74	0.17	0.05
12	-0.09	0.17	0.16	-0.19	0.76	0.03	0.08	-0.11	-0.02
13	0.15	0.13	0.15	0.21	-0.06	0.49	-0.46	0.01	0.29
14	0.09	0.31	0.18	0.74	-0.18	0.06	-0.01	-0.20	0.08
15	0.20	0.61	- 0.09	0.01	-0.19	-0.27	0.07	0.25	0.29
16	0.01	0.06	0.66	0.12	0.19	-0.12	0.07	0.03	0.22
17	0.10	0.03	0.07	0.02	0.00	0.14	0.14	0.88	0.03
18	-0.03	0.72	0.12	0.07	0.15	0.22	0.26	-0.29	-0.15
19	-0.15	0.09	0.14	0.02	0.00	0.13	0.16	0.01	0.79
20	0.08	0.84	-0.10	0.07	0.08	-0.02	-0.08	0.12	0.04
21	-0.36	0.32	0.29	0.10	-0.21	0.16	-0.35	0.44	-0.10
22	-0.06	-0.02	-0.08	0.86	0.00	-0.01	-0.07	0.14	-0.07

APPENDIX J

LIST OF EIGENVALUES FOR THE FACTOR ANALYSIS OF THE GERIATRIC LEARNED HELPLESSNESS SCALE

FACTOR	EIGENVALUE	PCT OF VAR	CUM PCT
1	2.71	15.1	15.1
2	1.93	10.7	25.8
3	1.66	9.2	35.0
4	1.63	9.1	44.1
5	1.41	7.8	51.9
6	1.21	6.7	58.6
7	1.13	6.3	64.9
8	1.00	5.5	70.4
9	0.92	5.1	75.5
10	0.73	4.1	79.6

APPENDIX K

GERIATRIC LEARNED HELPLESSNESS SCALE

FACTOR ANALYSIS

(SIX FACTORS GENERATED WITH ITEMS 5,11,14 &19 REMOVED)

	FACTOR					
VARIABLE	1	2	3	4	5	6
1	0.64	0.23	-0.10	0.14	-0.13	0.10
2	0.65	-0.05	0.06	-0.14	0.10	0.43
3	0.27	0.54	-0.05	-0.12	0.32	0.30
4	0.03	0.71	0.23	0.06	-0.03	0.12
6	0.06	0.66	-0.10	0.03	0.22	-0.22
7	-0.17	0.06	0.14	0.45	-0.39	0.42
8	0.38	0.50	0.10	0.24	-0.31	0.09
9	0.66	0.15	-0.00	-0.05	0.09	-0.06
10	0.04	-0.01	-0.17	0.83	0.13	0.00
12	0.51	-0.18	0.22	0.18	-0.15	-0.45
13	0.25	0.19	0.05	0.14	0.69	-0.07
15	-0.31	0.28	0.61	-0.06	0.08	0.16
16	0.02	0.08	0.08	0.76	0.14	-0.08
17	0.14	0.00	0.08	-0.00	0.17	0.75
18	0.24	-0.16	0.76	0.12	-0.12	-0.07
20	-0.01	0.10	0.81	-0.11	0.17	0.05
21	-0.13	-0.34	0.16	0.19	0.62	0.23
22	-0.10	0.10	0.01	0.03	0.41	0.13

APPENDIX L

MULTIPLE REGRESSION

```
Dependent Variable: Helplessness

Variables in Regression Equation: Depression, Age, Length of
     Stay, Subjective Health, Social Contact, Phone Contact,
     and Functional Dependence.

Variable(s) Entered on Step Number 1:  Depression

Multiple R        0.65     Analysis of Variance
R. sq             0.42                   DF   Sum of Sq   Mean Sq
Adjusted R sq     0.42   Regression      1    393.54      393.54
Standard Error    2.37   Residual       96    537.37        5.60

                         F=70.31              Signif F=0.00

..........Variables in the Equation................

Variable         B       SE B     Beta      T       Sig T

Depression     0.39     0.05      0.65    8.39      0.00
(constant)     2.52     0.53              4.73      0.00


..........Variables not in the Equation............

Variable    Beta In    Partial    Min Toler     T     Sig T

Age          0.03        0.04       0.99       0.35    0.73
Length      -0.06       -0.08       0.99      -0.73    0.47
Health      -0.14       -0.17       0.88      -1.71    0.09
Social       0.13        0.16       0.94       1.60    0.11
Phone        0.07        0.90       0.90       0.88    0.38
Depend       0.07        0.09       0.90       0.91    0.37
```

APPENDIX M

MULTIPLE REGRESSION

Dependent Variable: Depression
Variables in Regression Equation: Helplessness, Age, Length of Stay, Subjective Health, Social Contact, Phone Contact, and Functional Dependence.

```
Variable(s) Entered on Step Number 1:  Helplessness

Multiple R        0.65     Analysis of Variance
R. sq             0.42                 DF   Sum of Sq   Mean Sq
Adjusted R sq     0.42   Regression     1   1081.97     1081.97
Standard Error    3.92   Residual      96   1477.39       15.39

                         F=70.31            Signif F=0.00

..........Variables in the Equation................

Variable         B        SE B     Beta      T      Sig T

Helplessness  1.08      0.13     0.65    8.39     0.00
(constant)    3.15      0.93             3.41     0.00


..........Variables not in the Equation............

Variable     Beta In    Partial    Min Toler     T    Sig T

Age           0.03       0.04       0.99       0.43   0.67
Length       -0.08       0.11       1.00       1.05   0.30
Health       -0.14      -0.17       0.88      -1.70   0.09
Social        0.06       0.08       0.93       0.80   0.43
Phone         0.15       0.19       0.93       1.85   0.07
Depend        0.15       0.19       0.93       1.84   0.07
```